

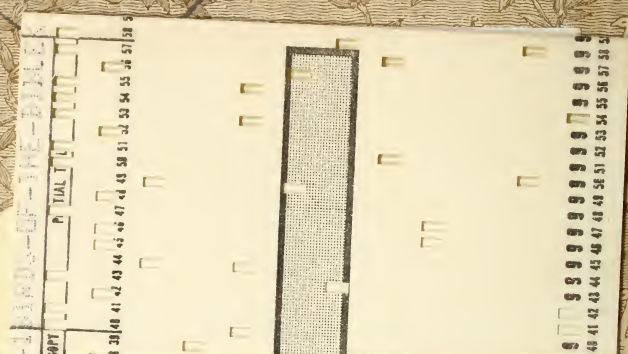
BIRDS OF THE BIBLE

BY THE
REV. J. G. WOOD



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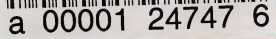


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BIRDS OF THE BIBLE

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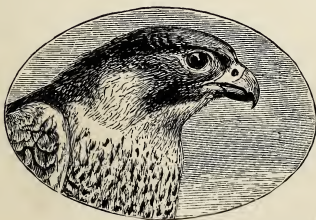
'As for the stork, the fir-trees are her house.'—Ps. civ. 17.

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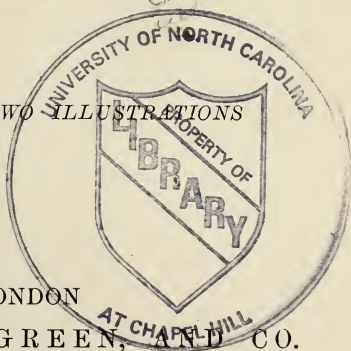
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'BIBLE ANIMALS,' BY REV. J. G. WOOD, M.A. F.L.S. &c.

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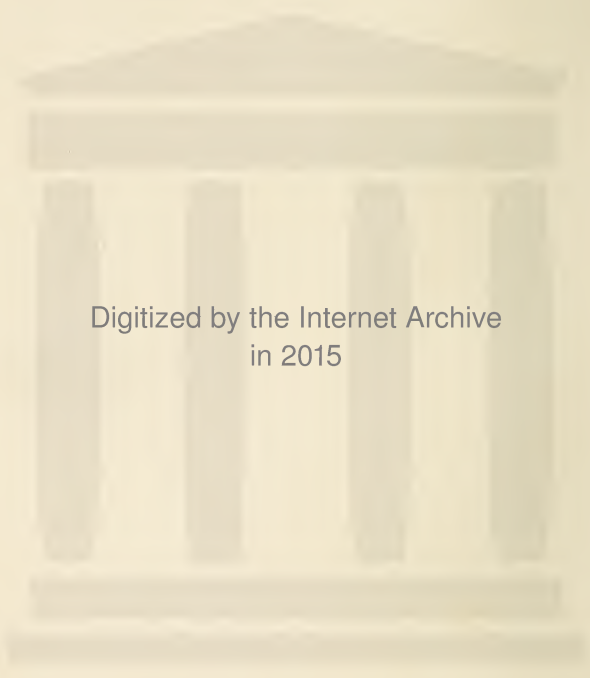


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BIRDS OF THE BIBLE.

I.

THE LÄMMERGEIER, OR OSSIFRAGE OF SCRIPTURE.

Difficulty of identifying the various birds mentioned in Scripture—The vultures of Palestine—The Lämmergeier, or Ossifrage of Scripture—The Hebrew word *Peres*, and its signification—The Ossifrage, or Bone-breaker—Appearance of the Lämmergeier—Its flight and mode of feeding—How the Lämmergeier kills snakes and tortoises, and breaks marrow-bones—Mode of destroying the chamois and mountain sheep—Nest of the Lämmergeier.

It is a well-known fact that even the best Biblical scholars have found very great difficulties in identifying several of the animals which are named in Scripture. This difficulty is greatly increased when we come to the BIRDS, and in many instances it is absolutely impossible to identify the Hebrew word with any precise species. In all probability, however, the nomenclature of the birds is a very loose one, several species being classed under the same title.

Even at the present day, the English language presents many similar instances of poverty, as is well

known to all zoologists. Taking the birds as our first examples, how often do we not find the same word used to signify many distinct species, and, again, one species designated by several dissimilar words? The word Vulture, for example, is used to signify a great number of birds, including the Lämmergeier, the Condors, the Griffons, the Caracaras, and others; while the term Eagle has scarcely a less wide signification. Sometimes the name is applied in such a manner as to mislead those who are not scientific ornithologists, and we find such inappropriate titles as night-hawk, fern-owl, hedge-sparrow, reed-wren, &c., the birds in question being neither hawks, owls, sparrows, nor wrens.

Keeping this difficulty in mind, I shall mention all the species which are likely to have been classed under a single title, giving a general description of the whole, and a detailed account of the particular species which seems to answer most closely to the Hebrew word.

Following the arrangement which has been employed in this work, I shall begin with the bird which has been placed by zoologists at the head of its class, namely, the LÄMMERGEIER, the bird which may be safely identified with the Ossifrage of Scripture. The Hebrew word is 'Peres,' a term which only occurs twice when signifying a species of bird; namely, in Lev. xi. 13, and the parallel passage in Deut. xiv. 12. The first of these passages runs as follows: 'These ye shall have in abomination among the fowls; they shall not be eaten, they are an abomination: the eagle, and the ossifrage, and the ospray.' The corresponding passage in Deuteronomy has precisely the same signification, though rather differ-

ently worded : 'These are they of which ye shall not eat : the eagle, and the ossifrage, and the ospray.'



THE LÄMMERGEIER, OR OSSIFRAGE OF SCRIPTURE.

'These are they of which ye shall not eat: the eagle, and the ossifrage, and the ospray.'
DEUT. xiv. 12.

The reader will here notice that the sacred narrative gives no account of the appearance or habits of the bird,

but merely classes it with the remainder of the predacious birds, all of which are declared to be unfit for food. We must therefore look for some assistance in the etymology of the word *peres*, which signifies one who breaks anything. The same word occurs in several other passages of Scripture.

For example, the word was much used by David in commemorating any remarkable event. When David sent Uzzah and Ahio to fetch the ark from Kirjath-jearim, the oxen which drew the cart stumbled and shook the ark, so that it seemed likely to fall. Uzzah, who walked by the side of the cart, while his brother marched in front of the oxen, instinctively put out his hand to uphold it, and fell dead by the side of the ark which he had touched without authority. In order to commemorate this event, David called the spot whereon it occurred Perez-Uzzah, or the Breaking of Uzzah, 'because the LORD had made a breach upon Uzzah.' (See 2 Sam. vi. 8.)

Reference to this event was afterwards made by David when he brought the ark into Jerusalem. Having taken warning by the solemn event which he had witnessed, he called together the priests and Levites, to whom he gave the commission to bring the ark with due honour, and 'said unto them, Ye are the chief of the fathers of the Levites: sanctify yourselves, both ye and your brethren, that ye may bring up the ark of the LORD God of Israel unto the place that I have prepared for it.

'For, because ye did it not at the first, the LORD our God made a breach (*peres*) upon us, for that we sought Him not in due order' (1 Chron. xv. 12, 13). David again employed the word to signify the breaking up or

destruction of the Philistines. ‘David smote them there, and said, The LORD hath broken forth upon mine enemies before me, as the breach of waters. Therefore he called the name of that place Baal-perazim’—*i.e.* the Place of Breakings. The same word occurs again in that dread message to Belshazzar, written by the hand upon the wall, ‘Mene, mene, tekél, upharsin,’ or *peres*, the last word signifying that the kingdom was broken up, and would be given to other rulers.

The word *peres*, then, signifies a breaker; and the Latin term *Ossifraga*, or Bone-breaker, is a very good translation of the word. How it applies to the Lämmergeier we shall presently see.

The Lämmergeier belongs to the vultures, but has much more the appearance of an eagle than a vulture, the neck being clothed with feathers, instead of being naked or only covered with down. It may at once be known by the tuft of long, hair-like feathers which depends from the beak, and which has gained for the bird the title of Bearded Vulture. The colour of the plumage is a mixture of different browns and greys, tawny below and beautifully pencilled above, a line of pure white running along the middle of each feather. When young it is nearly black, and indeed has been treated as a separate species under the name of Black Vulture.

It is one of the largest of the flying birds, its length often exceeding four feet, and the expanse of its wings being rather more than ten feet. In consequence of this great spread of wing, it looks when flying like a much larger bird than it really is, and its size has often been variously misstated. Its flight, as may be imagined from

the possession of such wings, is equally grand and graceful, and it sweeps through the air with great force, apparently unaccompanied by effort.

The Lämmergeier extends through a very large range of country, and is found throughout many parts of Europe and Asia. It is spread over the Holy Land, never congregating in numbers, like ordinary vultures, but living in pairs, and scarcely any ravine being uninhabited by at least one pair of Lämmergeiers.

The food of the Lämmergeier is, like that of other vultures, the flesh of dead animals, though it does not feed quite in the same manner that they do. When the ordinary vultures have found a carcase they tear it to pieces, and soon remove all the flesh. This having been done, the Lämmergeier comes to the half-picked bones, eats the remaining flesh from them, and finishes by breaking them and eating the marrow. That a bird should be able to break a bone as thick and hard as the thigh-bone of a horse or ox seems rather problematical, but the bird achieves the feat in a simple and effectual manner.

Seizing the bone in its claws, it rises to an immense height in the air, and then, balancing itself over some piece of rock, it lets the bone fall, and sweeps after it with scarce less rapidity than the bone falls. Should the bone be broken by the fall, the bird picks the marrow out of the fragments; and should it have escaped fracture by reason of falling on a soft piece of ground instead of a hard rock, the bird picks it up, and renews the process until it has attained its object. It will be seen, therefore, that the name of Ossifrage, or Bone-breaker, may very properly be given to this bird.

Not only does it extract the marrow from bones in this peculiar manner, but it procures other articles of food by employing precisely the same system. If it sees a tortoise, many of which reptiles are found in the countries which it inhabits, it does not waste time and trouble by trying to peck the shell open, but carries its prey high in the air, drops it on the ground, and so breaks its shell to pieces. Tortoises are often very hard-shelled creatures, and the Lämmergeier has been observed to raise one of them and drop it six or seven times before the stubborn armour would yield. Snakes, too, are killed in a similar manner, being seized by the neck, and then dropped from a height upon rocks or hard ground. The reader may perhaps be aware that the Hooded Crow of England breaks bones and the shells of bivalve molluscs in a similar manner.

Mr. Tristram suggests, with much probability, that the 'eagle' which mistook the bald head of the poet Æschylus for a white stone, and killed him by dropping a tortoise upon it, was in all likelihood a Lämmergeier, the bird being a denizen of the same country, and the act of tortoise-dropping being its usual mode of killing those reptiles.

We now see why the Lämmergeier is furnished with such enormous wings, and so great a power of flight, these attributes being needful in order to enable it to lift its prey to a sufficient height. The air, as we all know, becomes more and more attenuated in exact proportion to the height above the earth; and did not the bird possess such great powers of flight, it would not be able to carry a heavy tortoise into the thinner strata of air which are found at the height to which it soars.

The instinct of killing its prey by a fall is employed against other animals besides snakes and tortoises, though exerted in a somewhat different manner. The bird, as has already been mentioned, lives among mountain ranges, and it may be seen floating about them for hours together, watching each inch of ground in search of prey. Should it see a goat or other inhabitant of the rocks standing near a precipice, the Lämmergeier sweeps rapidly upon it, and with a blow of its wing knocks the animal off the rock into the valley beneath, where it lies helplessly maimed, even if not killed by the fall.

Even hares and lambs are killed in this manner, and it is from the havoc which the Lämmergeier makes among the sheep that it has obtained the name of Lämmergeier, or Lamb-Vulture. So swift and noiseless is the rush of the bird, that an animal which has once been marked by its blood-red eye seldom escapes from the swoop; and even the Alpine hunters, who spend their lives in pursuit of the chamois, have occasionally been put in great jeopardy by the sudden attack of a Lämmergeier, the bird having mistaken their crouching forms for the chamois, and only turned aside at the last moment.

The reason for employing so remarkable a mode of attack is to be found in the structure of the feet, which, although belonging to so large and powerful a bird, are comparatively feeble, and are unable, like those of the eagle, to grasp the living animal in a deadly hold, and to drive the sharp talons into its vitals. They are not well adapted for holding prey, the talons not possessing the hook-like form or the sharp points which characterise those of the eagle. The feet, by the way, are feathered

down to the toes. The beak, too, is weak when compared with the rest of the body, and could not perform its work were not the object which it tears previously shattered by the fall from a height.

The nest of the Lämmergeier is made of sticks and sods, and is of enormous dimensions. It is almost always placed upon a lofty cliff, and contains about a wagon-load or so of sticks rudely interwoven, and supporting a nearly equal amount of sods and moss.

An allied species lives in Northern Africa, where it is called by a name which signifies Father Longbeard, in allusion to the beard-like tufts of the bill.

II.

THE EGYPTIAN VULTURE, OR GIER-EAGLE.

The Râchâm or Gier-Eagle identified with the Egyptian Vulture—Its appearance on the Egyptian monuments—Signification of the word *Râchâm*—Various translations of the word—The shape, size, and colour of the bird—Its value as a scavenger, and its general habits—The Egyptian Vultures and the griffons—Its fondness for the society of man—Nest of the Egyptian Vulture.

IN the same list of unclean birds which has already been given, we find the name of a bird which we can identify without much difficulty, although there has been some little controversy about it. This is the so-called Gier-Eagle, which is named with the cormorant and the pelican as one of the birds which the Jews are forbidden to eat. The word which is translated as Gier-Eagle is *Râchâm*, a name which is almost identical with the Arabic name of the EGYPTIAN VULTURE, sometimes called

Pharaoh's Chicken, because it is so often sculptured on the ancient monuments of Egypt. It is called by the Turks by a name which signifies White Father, in allusion to the colour of its plumage.

Before proceeding to a description of the bird, we will examine the other interpretations which have been given to the word *râchâm*.

In the first place the word signifies 'love,' and is used in that sense in many passages of Scripture. According to Buxtorf, the bird in question is the merops or bee-eater, 'a bird so called from the love and pity which is shown to its parents, because it nurtures them when hidden in the most lofty caves.' Some of the Talmudists take it to be the woodpecker.

Another rendering of the word which has received much favour is, that the *Râchâm* is the hyacinthine gallinule, or sultana hen. This bird is allied to the rails, and is remarkable for the great length of its toes, by means of which it can walk on floating herbage as it lies on the surface of the water. The colour of the bird is a rich and variable blue, darker on the back and lighter on the throat and breast. It is on account of this purple hue that the bird has received the name of *Porphyrio*, or Purple Bird. It is spread over many parts of Asia, Africa, and Europe.

The reading of *râchâm* as *porphyrio* is followed in the Septuagint, and the reading has been defended on the ground that the bird must belong to the aquatic group, being placed between the pelican and cormorant. The Jewish Bible follows our version, but affixes the mark of doubt to the word.

Although some of the Talmudists render the word as

woodpecker, others identify it with the Egyptian Vulture. In Lewysohn's 'Zoologie des Talmuds' there is a curious



EGYPTIAN VULTURE, OR GIER-EAGLE.

'And the pelican, and the gier-eagle, and the cormorant.'—DEUT. xiv. 17.

speculation on this subject. This bird, according to the authors whom he quotes, is the Schirkrek, and derives its name from its peculiar cry, which begins with a hiss

(Schirk) and ends with a shriek (Rek). The bird utters its cry when the rising of the Nile is expected, and so has earned the name of Râchâm, or Love, this word being frequently used in the Scriptures as a metaphor for rain, dew, or any water that nourishes plants.

Without adopting the process of reasoning employed in this case, we may safely accept the conclusion, and consider the Râchâm as identical with the Egyptian Vulture.

This bird is not a very large one, being about equal to a raven in size, though its enormously long wings give it an appearance of much greater size. Its colour is white, with the exception of the quill feathers of the wings, which are dark-brown. The bill and the naked face and legs are bright ochreous yellow. It does not attain this white plumage until its third year, its colour before reaching adult age being brown, with a grey neck and dull yellow legs and face.

The Egyptian Vulture, although not large, is a really handsome bird, the bold contrast of pure white and dark brown being very conspicuous when it is on the wing. In this plumage it has never been seen in England, but one or two examples are known of the Egyptian Vulture being killed in England while still in its dark-brown clothing.

It inhabits a very wide range of country, being found throughout all the warmer parts of the Old World. Although it is tolerably plentiful, it is never seen in great numbers, as is the case with several of the vultures, but is always to be found in pairs, the male and female never separating, and invariably being seen

close together. In fact, in places where it is common it is hardly possible to travel more than a mile or two without seeing a pair of Egyptian Vultures. Should more than two of these birds be seen together, the spectator may be sure that they have congregated over some food. It has been well suggested that its Hebrew name of Râchâm, or Love, has been given to it in consequence of this constant association of the male and female.

The Egyptian Vulture is one of the best of scavengers, not only devouring the carcasses of dead animals, but feeding on every kind of offal or garbage. Indeed, its teeth and claws are much too feeble to enable it to cope with the true vultures in tearing up a large carcase, and in consequence it never really associates with them, although it may be seen hovering near them, and it never ventures to feed in their company, keeping at a respectful distance while they feed, and, when they retire, humbly making a meal on the scraps which they have left.

Mr. Tristram narrates an amusing instance of this trait of character. ‘On a subsequent occasion, on the north side of Hermon, we observed the griffons teaching a lesson of patience to the inferior scavengers. A long row of Egyptian vultures were sitting on some rocks, so intently watching a spot in a cornfield that they took no notice of our approach. Creeping cautiously near, we watched a score of griffons busily engaged in turning over a dead horse, one side of which they had already reduced to a skeleton.

‘Their united efforts had just effected this, when we showed ourselves, and they quickly retired. The inferior

birds, who dreaded us much less than them, at once darted to the repast, and, utterly regardless of our presence within ten yards of them, began to gorge. We had hardly retired two hundred yards, when the griffons came down with a swoop, and the Egyptian vultures and a pair or two of eagles hurriedly resumed their post of observation; while some black kites remained, and contrived by their superior agility to filch a few morsels from their lordly superiors.'

So useful is this bird as a scavenger, that it is protected in all parts of the East by the most stringent laws, so that a naturalist who wishes for specimens has some difficulty in procuring the bird, or even its egg. It wanders about the streets of the villages, and may generally be found investigating the heaps of refuse which are left to be cleared away by the animals and birds which constitute the scavengers of the East.

It not only eats dead animal substances, but kills and devours great quantities of rats, mice, lizards, and other pests that swarm in hot countries. So tame is it, that it may even be observed, like the gull and the rook of our own country, following the ploughman as he turns up the ground, and examining the furrow for the purpose of picking up the worms, grubs, and similar creatures that are disturbed by the share.

Being thus protected and encouraged by man, there is good reason why it should have learned in course of time to fear him far less than its own kind. Indeed, it is so utterly fearless with regard to human beings, that it habitually follows the caravans as they pass from one town to another, for the sake of feeding on the refuse food and other offal which is thrown aside on the road.

Two articles of diet which certainly do not seem to fall within the ordinary range of vultures' food are said to be consumed by this bird. The first is the egg of the ostrich, the shell of which is too hard to be broken by the feeble beak of the Egyptian Vulture. The bird cannot, like the *lämmergeier*, carry the egg into the air and drop it on the ground, because its feet are not large enough to grasp it, and only slip off its round and polished surface. Therefore, instead of raising the egg into the air and dropping it upon a stone, it carries a stone into the air and drops it upon the egg. So at least say the natives of the country which it inhabits, and there is no reason why we should doubt the truth of the statement.

The other article of food is a sort of melon, very full of juice. This melon is called 'nara,' and is devoured by various creatures, such as lions, leopards, mice, ostriches, &c., and seems to serve them instead of drink.

The nest of the Egyptian Vulture is made in some rocky ledge, and the bird does not trouble itself about selecting a spot inaccessible to man, knowing well that it will not be disturbed. The nest is, like that of other vultures, a large and rude mass of sticks, sods, bones, and similar materials, to which are added any bits of rag, rope, skin, and other village refuse which it can pick up as it traverses the streets. There are two, and occasionally three, eggs, rather variously mottled with red. In its breeding, as in its general life, it is not a gregarious bird, never breeding in colonies, and, indeed, very seldom choosing a spot for its nest near one which has already been selected by another pair.

The illustration on page 11 represents part of the nest of the Egyptian Vulture, in which the curious

mixture of bones and sticks is well shown. The parent birds are drawn in two characteristic attitudes taken from life, and well exhibit the feeble beak, the peculiar and intelligent, almost cunning expression of the head, and the ruff of feathers which surrounds the upper part of the neck. In the distance another bird is drawn as it appears on the wing, in order to show the contrast between the white plumage and the dark quill feathers of the wings, the bird presenting a general appearance very similar to that of the common English sea-gull.

III.

THE GRIFFON VULTURE, OR EAGLE OF SCRIPTURE.

The Griffon Vulture identified with the Eagle of Scripture—The word *Nesher* and its signification—Geographical range of the Griffon—Its mode of flight and sociable habits—The featherless head and neck of the bird—The Vulture used as an image of strength, swiftness, and rapacity—Its powers of sight—How Vultures assemble round a carcase—Nesting-places of the Griffon—Mr. Tristram's description of the Griffon—Rock-caves of the Wady Hamâm—Care of the young, and teaching them to fly—Strength of the Griffon—Its emblematical use in Egypt and Assyria—The god Nisroch—Noble aspect of the Griffon—Its longevity—Various attitudes assumed by the bird.

WE now come to another word which will give us but little trouble in identification. This is the word *Nesher*, which is invariably translated in the Authorized Version of the Bible as Eagle, but which was undoubtedly a different bird, and has satisfactorily been identified with the GRIFFON VULTURE, or Great Vulture. The reasons for this conclusion are so inextricably interwoven with the various passages in which the bird is mentioned,

that I shall not give them separately, but simply allude to them in the course of the article.

In the first place, the name *Nesher* is derived, according to many Hebraists, from a word which signifies the power of sight, and is given to the bird in consequence of its piercing vision. The Talmudical writers mention a curious proverb concerning the sight of the Vulture, namely, that a Vulture in Babylon can see a carcase in Palestine. Other scholars derive it from a word which signifies its longevity, while others again believe that the true derivation is to be found in a word which signifies ripping up or tearing with the beak.

The Griffon Vulture is found throughout a large portion of the Old World, inhabiting nearly all the warmer portions of this hemisphere. The colour of the adult bird is a sort of yellowish brown, diversified by the black quill feathers and the ruff of white down that surrounds the neck. The head and neck are without feathers, but are sparingly covered with very short down of a similar character to that of the ruff.

It is really a large bird, being little short of five feet in total length, and the expanse of wing measuring about eight feet.

The Griffon Vulture is very plentiful in Palestine, and, unlike the lesser though equally useful Egyptian Vulture, congregates together in great numbers, feeding, flying, and herding in company. Large flocks of them may be seen daily, soaring high in the air, and sweeping their graceful way in the grand curves which distinguish the flight of the large birds of prey. They are best to be seen in the early morning, being in the habit of

quitting their rocky homes at daybreak, and indulging in a flight for two or three hours, after which they mostly return to the rocks, and wait until evening, when they take another short flight before retiring to rest.

Allusion is made in the Scriptures to the gregarious habits of the Vultures: 'Wheresoever the carcase is, there will the eagles be gathered together' (Matt. xxiv. 28). That the Vulture, and not the eagle, is here signified, is evident from the fact that the eagles do not congregate like the Vultures, never being seen in greater numbers than two or three together, while the Vultures assemble in hundreds.

The featherless head of the Vulture is mentioned in the Book of Micah, chap. i. ver. 16: 'Make thee bald, and poll thee for thy delicate children; enlarge thy baldness as the eagle; for they are gone into captivity from thee.' It is evident that in this passage reference is made, not to the eagle, whose head is thickly covered with feathers, but to the Vulture, whose head and neck are but scantily sprinkled with white down. Some commentators, not aware that the word *nesher* should have been rendered as 'vulture,' have explained the passage by saying that the prophet referred to the moulting-time of the eagle; but the reader will see that such an explanation is at the best a forced one, whereas the reference to the bald head of the Vulture is both simple and natural.

The voracity of the Vulture, and its capacity for discovering food, are both mentioned in Job xxxix. 27-30: 'Doth the eagle (*nesher*) mount up at thy command, and make her nest on high?

'She dwelleth and abideth on the rock, upon the crag of the rock, and the strong place.

‘From thence she seeketh the prey, and her eyes behold afar off.

‘Her young ones also suck up blood : and where the slain are, there is she.’

See also Hab. i. 6–8, in which the prophet speaks of the Chaldeans, ‘that bitter and hasty nation, which shall march through the breadth of the land, to possess the dwelling-places that are not theirs.

‘They are terrible and dreadful : . . . and their horsemen shall spread themselves, and their horsemen shall come from far ; they shall fly as the eagle that hasteth to eat.’

There is also a curious passage in the Book of Proverbs, chap. xxx. ver. 17, which alludes to the carnivorous nature of the bird : ‘The eye that mocketh at his father, and despiseth to obey his mother, the ravens of the valley shall pick it out, and the young eagles shall eat it.’

Allusion is made in several passages to the swiftness of the Vulture, as well as its voracity. See, for example, a portion of David’s lamentation over the bodies of Saul and Jonathan, who, according to the poet’s metaphor, ‘were lovely and pleasant in their lives, and in their death they were not divided ; they were swifter than eagles, they were stronger than lions.’

The ‘bitter’ people—namely, the Chaldeans—are again mentioned in a very similar manner by the prophet Jeremiah : ‘Our persecutors are swifter than the eagles of the heavens ; they pursued us upon the mountains, they laid wait for us in the wilderness’ (Lam. iv. 19).

There is something peculiarly appropriate in employing the Vulture as an image of strength and swiftness

when applied to warriors, the bird being an invariable attendant on the battle, and flying to the field of death with marvellous swiftness. All who had ever witnessed a battle were familiar with the presence of the Vulture—the scene of carnage, and the image which is employed, would be one which commended itself at once to those for whom it was intended. And, as the earlier history of the Jewish nation is essentially of a warlike character, we cannot wonder that so powerful and familiar an image should have been repeatedly introduced into the sacred writings.

The wonderful powers of sight possessed by this bird are mentioned in the passage from Job xxxix. which has already been quoted.

Here it may be as well to say that, piercing as is the vision of the Vulture, its visual powers have been much exaggerated. It certainly does possess a vision of no ordinary capacity, which is able to assume either a telescopic or a microscopic character, by means of a complex and marvellous structure, which can alter the whole shape of the organ at the will of the bird.

Not only can the eye be thus altered, but it changes instantaneously, so as to accommodate itself to the task which it is to perform. A Vulture, for example, sees from a vast height the body of a dead animal, and instantly swoops down upon it like an arrow from a bow. In order to enable the bird to see so distant an object, the eye has been exercising its telescopic powers, and yet, in a second or two, when the Vulture is close to its prey, the whole form of the eye must be changed, or the bird would mistake its distance, and dash itself to pieces on the ground.

To describe this beautiful piece of mechanism would be outside the scope of the present work ; but the reader can find it in every good work on comparative anatomy, and is strongly advised to make himself master of the means by which a result so apparently impossible is secured.

By means of its powerful eyes the Vulture can see to an enormous distance, and with great clearness, but neither so far nor so clearly as is popularly supposed. It is true that, as soon as a carcase is discovered, it will be covered with Vultures, who arrive from every side, looking at first like tiny specks in the air, scarcely perceptible even to practised eyes, and all directing their flight to the same point. 'Where the carcase is, there will the vultures be gathered together.' But, although they all fly towards the same spot, it does not follow that they have all seen the same object. The fact is they see and understand each other's movements.

A single Vulture, for example, sees a dead or dying sheep, and swoops down upon it. The other Vultures which are flying about in search of food, and from which the animal in question may be concealed, know perfectly well that a Vulture soars high in the air when searching for food, and only darts to the earth when it has found a suitable prey. They immediately follow its example, and in their turn are followed by other Vultures, which can see their fellows from a distance, and know perfectly well why they are all converging to one spot.

In this way all the Vultures of a neighbourhood will understand, by a very intelligible telegraph, that a dead body of some animal has been found, and, aided by their

wonderful powers of flight, will assemble over its body in an almost incredibly short space of time.

The resting-place of the Griffon Vulture is always on some lofty spot. The Arabian Vulture will build within easy reach, the eagle prefers lofty situations, but nothing but the highest and most inaccessible spots will satisfy the Vulture. To reach the nest of this bird is therefore a very difficult task, only to be attempted by experienced and intrepid cragsmen; and, in consequence, both the eggs and young of the Griffon Vulture cannot be obtained except for a very high price. The birds are fond of building in the rock-caves which are found in so many parts of Palestine, and in some places they fill these places as thickly as rooks fill a rookery.

The fondness of the Vulture for such localities is more than once mentioned in Holy Writ. One of these passages, which occurs in Job xxxix. 29, has already been quoted, and another, and equally forcible one, is to be found in the Book of the Prophet Jeremiah: 'Thy terribleness hath deceived thee, and the pride of thine heart, O thou that dwellest in the clefts of the rock, that holdest the height of the hill: though thou shouldest make thy nest as high as the eagle (*nesher*), I will bring thee down from thence, saith the LORD' (Jer. xlix. 16).

In Mr. Tristram's 'Land of Israel' there is a very graphic description of the Griffons' nests, and of the difficulty experienced in reaching them. 'A narrow gorge, with limestone cliffs from five hundred to six hundred feet high, into which the sun never penetrates, walls the rapid brook on each side so closely that we often had to ride in the bed of the stream. The cliffs

are perforated with caves at all heights, wholly inaccessible to man, the secure resting-place of hundreds of noble griffons, some l  mmergeiers, lanner falcons, and several species of eagle. . . . One day in the ravine well repaid us, though so terrific were the precipices, that it was quite impossible to reach any of the nests with which it swarmed.

‘We were more successful in the Wady Ham  m, the south-west end of the plain, the entrance from Hattin and the Buttauf, where we spent three days in exploration. The cliffs, though reaching the height of fifteen hundred feet, rise like terraces, with enormous masses of *d  bris*, and the wood is half a mile wide. By the aid of Giacomo, who proved himself an expert rope-climber, we reaped a good harvest of griffons’ eggs, some of the party being let down by ropes, while those above were guided in working them by signals from others below in the valley. It required the aid of a party of a dozen to capture these nests. The idea of scaling the cliff with ropes was quite new to some Arabs who were herding cattle above, and who could not, excepting one little girl, be induced to render any assistance. She proved herself most sensible and efficient in telegraphing.

‘While capturing the griffons’ nests, we were re-enacting a celebrated siege in Jewish history. Close to us, at the head of the cliffs which form the limits of the celebrated Plain of Hattin, were the ruins of Irbid, the ancient Arbela, marked principally by the remains of a synagogue, of which some marble shafts and fragments of entablature, like those of Tell H  m, are still to be seen, and were afterwards visited by us.

‘Hosea mentions the place apparently as a strong

fortress : “ All thy fortresses shall be spoiled, as Shalman spoiled Betharbel in the day of battle ” (Hos. x. 14). Perhaps the prophet here refers to the refuges in the rocks below.

‘ The long series of chambers and galleries in the face of the precipice are called by the Arabs Kulat Ibn Maân, and are very fully described by Josephus. These cliffs were the homes of a set of bandits, who resided here with their families, and for years set the power of Herod the Great at defiance. At length, when all other attempts at scaling the fortress had failed, he let down soldiers at this very spot in boxes by chains, who attacked the robbers with long hooks, and succeeded in rooting them all out. The exploit was familiar to us by an engraving of the “ Penny Magazine ” of old, and little did we dream that we should one day storm those very caves in a similar way ourselves. We could not but regret that Herod had neglected to leave his chains and grappling-irons for our use.

‘ The rock galleries, though now only tenanted by griffons, are very complete and perfect, and beautifully built. Long galleries wind backwards and forwards in the cliff side, their walls being built with dressed stone, flush with the precipice, and often opening into spacious chambers. Tier after tier rise one after another with projecting windows, connected by narrow staircases, carried sometimes upon arches, and in the upper portions rarely broken away. In many of the upper chambers to which we were let down the dust of ages had accumulated, undisturbed by any foot save that of the birds of the air ; and here we rested during the heat of the day, with the plains and lake set as in a frame before us.

We obtained a full zoological harvest, as in three days we captured fourteen nests of griffons.'

Although these caverns and rocky passages are much more accessible than most of the places whereon the Griffons build, the natives never venture to enter them, being deterred not so much by their height, as by their superstitious fears. The Griffons instinctively found out that man never entered these caverns, and so took possession of them.

As the young Griffons are brought up in these lofty and precipitous places, it is evident that their first flight must be a dangerous experiment, requiring the aid of the parent birds. At first the young are rather nervous at the task which lies before them, and shrink from trusting themselves to the air. The parents, however, encourage them to use their wings, take short flights in order to set them an example, and, when they at last venture from the nest, accompany and encourage them in their first journey.

Even this habit has been noted by the sacred writers, and been forcibly employed as an image of divine protection. See the Song of Moses, in which the aged leader, whose forty years' work was at last finished, recapitulates the mercies vouchsafed to the people of Israel, and exhorts them against the sin of ingratitude: 'For the LORD's portion is his people; Jacob is the lot of His inheritance.

'He found him in a desert land, and in the waste howling wilderness; He led him about, He instructed him, He kept him as the apple of His eye.

'As an eagle stirreth up her nest, fluttereth over her young, spreadeth abroad her wings, taketh them, beareth them on her wings;

‘ So the LORD alone did lead him, and there was no strange god with him ’ (Deut. xxxii. 9–12).

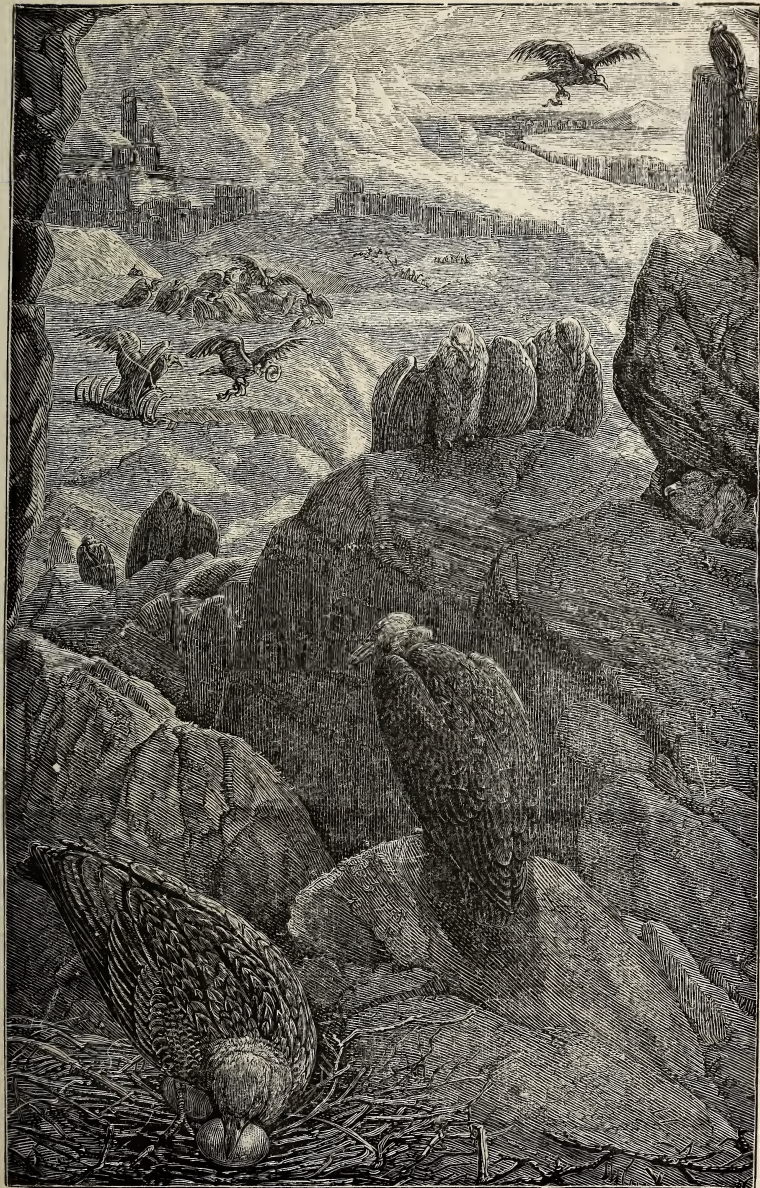
The strength of flight of the Vulture is also noticed by the sacred writers. See, for example, Exod. xix. 4 : ‘ Ye have seen what I did to the Egyptians, and how I bare you on eagles’ (*nesherim*) wings, and brought you unto myself.’

This passage had a peculiar force when addressed to the Hebrews, the Vulture being one of the chief emblems of Egyptian power, and its outspread wings continually recurring on the grand monuments and temples with which they must have been so familiar.

Strangely enough, in their second captivity, the Jews met with the same emblem among the Assyrians. For example, their god Nisroch, whom we find mentioned as specially worshipped by Sennacherib, was a vulture-headed deity, bearing not only the head of the bird, but also its wings. The vast wings of the Vulture were by the Assyrians used as types of Divine power, and were therefore added, not only to human figures, but to those of beasts. The human-headed and vulture-winged bulls of Nineveh, with which we are now so familiar, are good examples of this peculiar imagery.

The name Nisroch, by the way, is evidently the same word as *nesher*, and bears even closer resemblance to the Arabic *niss'r*. This bird was also the war standard of Assyria, just as the eagle is that of France, and the metaphors used by Habbakuk and Jeremiah had therefore a doubly forcible sense.

We find the same bird employed as a visible emblem of Divine omnipresence and omniscience in the visions seen by Ezekiel and St. John : ‘ And every one had four



THE VULTURE, OR EAGLE OF SCRIPTURE.

'Whosoever the carcase is, there will the eagles be gathered together.'—MATT xxi v. 28.

faces ; the first face was the face of a cherub, and the second face was the face of a man, and the third the face of a lion, and the fourth the face of an eagle' (Ezek. x. 14). Then, in the Revelation, chap. iv. ver. 6, 7, is the account of a vision of very similar character : ' In the midst of the throne, and round about the throne, were four beasts full of eyes before and behind.

' And the first beast was like a lion, and the second was like a calf, and the third beast had a face as a man, and the fourth beast was like a flying eagle.'

From these passages we shall see that the Griffon Vulture was not held by the Scriptural writers in the contempt with which we are apt to regard it. Not having any Vultures resident in our country, for the simple reason that there is not enough carrion in the whole of England to feed a single Vulture for a month, we have no practical knowledge of them, and are apt to confound, under the common title of Vulture, birds of most dissimilar aspect. Some of them, especially those which inhabit the West Indies, are mean-looking, slouching, sneaking, obscene birds, which, even when brought to this country, and nourished on fresh meat, cannot be regarded without inspiring a feeling of disgust.

But there are others which are really grand and noble birds, which excite admiration instead of disgust, and one of the chief among these is the Griffon Vulture. Scavenger though it be, it is not disgusting in its habits, and may even be called a cleanly bird. It is intelligent, after its way, and is quite as susceptible of human teaching as the falcon or the cormorant. It is not quarrelsome, and, even when feeding, does not try to drive away its neighbour, but feeds alongside of him with perfect amity and quiet.

In common with other birds of its order, the Griffon Vulture is a very long-lived bird, and even this characteristic is noticed in the well-known passage, 'Bless the LORD, O my soul, and forget not all His benefits: . . . who satisfieth thy mouth with good things; so that thy youth is renewed like the eagle's' (Ps. ciii. 1, 5).

This passage has often been absurdly misinterpreted by commentators who have not appreciated the metaphorical style of all Oriental poetry. Taking the passage in its exact literal sense, and not knowing that reference is made to the Vulture and not to the eagle, they have taken for granted that the eagle had some mode of renewing its youth, and, in fact, after becoming old, went through some process by which it shook off the decrepitude of old age, and became young again. Others, seeing that such an interpretation was both strained and far-fetched, have thought that reference was made to the annual moult of the eagle, which they fancied to be of a very severe character, the whole of the feathers being shed at once, so as to leave the bird naked and helpless, and then being restored with added strength and beauty.

It is evident, however, that no such interpretation is needed, and that the Psalmist, when using the expression 'renewing the youth like an eagle's,' only employed a metaphorical expression significative of longevity.

If we recapitulate the various passages in which the Nesher is mentioned in the Scriptures, we shall find that the sacred writers were thoroughly acquainted with the bird, and that they wrote of it with an occasional fulness and an invariable precision which shows how familiar they were with a bird at once so plentiful and so conspicuous.

The illustration represents one of the rocky gorges so plentiful in Palestine, inhabited by a number of Griffon Vultures. Some of them are feeding upon the carcase of a dead animal, another is upon her nest, and several Vultures, who have gorged themselves with food after their fashion, are sitting listlessly on the rock, in some of the singular positions which this bird affects. There is, perhaps, no bird which has a more curious set of attitudes than the Griffon Vulture, or which exhibits so different an aspect at various times.

In flight it is one of the most magnificent birds that can be seen, and even when perched it often retains a certain look of majesty and grandeur. Sometimes, however, especially when basking in the sun, it assumes a series of attitudes which are absolutely grotesque, and convert the noble-looking bird into a positively ludicrous object. At one moment it will sit all hunched up, its head sunk between its shoulders, and one wing trailing behind it as if broken. At another it will bend its legs and sit down on the ankle-joint, pushing its feet out in front, and supporting itself by the stiff feathers of its tail. Often it will crouch nearly flat on the ground, partly spread its wings, and allow their tips to rest on the earth, and sometimes it will support nearly all the weight of its body on the wings, which rest in a half doubled state on the ground. I have before me a great number of sketches, taken in a single day, of the attitudes assumed by one of these birds, every one of which is strikingly different from the others, and transforms the whole shape of the bird so much that it is scarcely recognisable as the same individual.

IV.

THE EAGLE.

Signification of the word *Asniyeh*—The Golden Eagle and its habits—

The Imperial Eagle—Its solitary mode of life—The Short-toed Eagle—Its domestic habits and fondness for the society of man—The Osprey, or Fishing Eagle—Its mode of catching fish—Its distribution in Palestine.

As to the EAGLE, rightly so called, there is little doubt that it is one of the many birds of prey that seem to have been classed under the general title of *Asniyeh*—the word which in the Authorized Version of the Bible is rendered as Osprey. A similar confusion is observable in the modern Arabic, one word, *ogab*, being applied indiscriminately to all the Eagles and the large *falconidæ*.

The chief of the true Eagles, namely, the Golden Eagle, is one of the inhabitants of Palestine, and is seen frequently, though never in great numbers. Indeed, its predacious habits unfit it for associating with its kind. Any animal which lives chiefly, if not wholly, by the chase, requires a large district in order to enable it to live, and thus twenty or thirty eagles will be scattered over a district of twice the number of miles. Like the lion among the mammalia, the Eagle leads an almost solitary life, scarcely ever associating with any of its kind except its mate and its young.

Although it lives principally by the chase, it has no objection to carrion, and, as has already been mentioned on page 14, may be seen feeding on a dead animal in company with the lesser vultures, though it retires before



THE EAGLE.

'Though thou shouldest make thy nest as high as the eagle.'—JER. xlix. 16.

the lordly griffon. Being so thinly scattered, it would not be so conspicuous a bird as the griffon, which is not only very much larger, but associates in great numbers, and probably on that account no definite species of Eagle seems to be mentioned in Holy Writ.

Four or five species of Eagle are known to inhabit Palestine. There is, for example, the Imperial Eagle, which may be distinguished from the Golden Eagle by a white patch on the shoulders, and the long, lancet-shaped feathers of the head and neck. These feathers are of a fawn colour, and contrast beautifully with the deep black-brown of the back and wings. It is not very often seen, being a bird that loves the forest, and that does not care to leave the shelter of the trees. It is tolerably common in Palestine.

Then there are several of the allied species, of which the best example is perhaps the Short-toed Eagle, a bird which is extremely plentiful in the Holy Land—so plentiful indeed that, as Mr. Tristram remarks, there are probably twice as many of the Short-toed Eagles in Palestine as of all the other species put together. The genus to which this bird belongs does not take rank with the true Eagles, but is supposed by systematic naturalists to hold an intermediate place between the true Eagles and the ospreys.

The Short-toed Eagle is seldom a carrion-eater, preferring to kill its prey for itself. It feeds mostly on serpents and other reptiles, and is especially fond of frogs. It is a large and somewhat heavily built bird, lightness and swiftness being far less necessary than strength in taking the animals on which it feeds. It is rather more than two feet in length, and is a

decidedly handsome bird, the back being dark brown, and the under parts white, covered with crescent-shaped black spots.

V.

THE OSPREY.

The Osprey, or Fishing Eagle—Its geographical range—Mode of securing prey—Structure of its feet—Its power of balancing itself in the air.

WE now come to the Osprey itself, which was undoubtedly one of the birds grouped together under the collective term Asniyeh. This word occurs only in the two passages in Deut. xiv. and Lev. xi. which have been several times quoted already, and need not be mentioned again.

This fine bird is spread over a very large range of country, and is found in the New World as well as the Old. In consequence of its peculiar habits it is often called the Fishing Eagle.

The Osprey is essentially a fish-eater. It seems very strange that a predacious bird allied to the eagles, none of which birds can swim, much less dive, should obtain its living from the water. That the cormorant and other diving birds should do so is no matter of surprise, inasmuch as they are able to pursue the fish in their own element, and catch them by superior speed. But any bird which cannot dive, and which yet lives on fish, is forced to content itself with those fish that come to the surface of the water, a mode of obtaining a livelihood which does not appear to have much chance of success. Yet the Osprey does on a large scale what the kingfisher



THE OSPREY.

'These are they of which ye shall not eat ; the eagle, and the ossifrage, and the ospray.'
DEUT. xiv. 12.

does on a small one, and contrives to find abundant food in the water.

Its method of taking prey is almost exactly like that which is employed by the kingfisher. When it goes out in search of food, it soars into the air, and floats in circles over the water, watching every inch of it as narrowly as a kestrel watches a stubble-field. No sooner does a fish rise toward the surface to take a fly, or to leap into the air for sport, than the Osprey darts downwards, grasps the fish in its talons, drags the struggling prey from the water, and with a scream of joy and triumph bears it away to shore, where it can be devoured at leisure.

The bird never dives, neither does it seize the fish with its beak like the kingfisher. It plunges but slightly into the water, as otherwise it would not be able to use its strong wings and carry off its prey. In order to enable the bird to seize the hard and slippery body of the fish, it is furnished with long, very sharp, and boldly-hooked talons, which force themselves into the sides of the fish, and hold it as with grappling irons.

In order to enable it to hover over the water, and to watch the surface carefully, it is possessed of wonderful powers of flight, being able to balance itself in one spot without seeming to move a wing, and having the singular faculty of doing so even when a tolerably strong breeze is blowing. It has even been observed to maintain its place unmoved when a sharp squall swept over the spot.

Although not very plentiful in Palestine, nor indeed in any other country, it is seen throughout the whole of that country where it can find a sufficiency of water. It prefers the seashore and the rivers of the coast, and is said to avoid the Sea of Galilee.

VI.

THE KITE, OR VULTURE OF SCRIPTURE.

The word *Dayah* and its signification—*Dayah* a collective term for different species of Kites—The Common or Red Kite plentiful in Palestine—Its piercing sight and habit of soaring—The Black Kite of Palestine and its habits—The Egyptian Kite—The Raah or Glede of Scripture—The Buzzards and their habits—The Peregrine Falcon an inhabitant of Central Palestine, and the Lanner of the eastern parts of the country.

IN Lev. xi. 14 and Deut. xiv. 13, we find the Vulture among the list of birds which the Jews were not permitted to eat. The word which is translated as Vulture is *dayah*, and we find it occurring again in Isaiah xxxiv. 15, 'There shall the vultures also be gathered, every one with her mate.' There is no doubt, however, that this translation of the word is an incorrect one, and that it ought to be rendered as KITE. In Job xxviii. 7, there is a similar word, *ayah*, which is also translated as Vulture, and which is acknowledged to be not a Vulture, but one of the Kites: 'There is a path which no fowl knoweth, and which the vulture's eye hath not seen.' Both these words are nearly identical with modern Arabic terms which are employed rather loosely to signify several species of Kite. Buxtorf, in his Hebrew Lexicon, gives the correct rendering, translating *dayah* as *Milvus*, and the Vulgate in one or two places gives the same translation, though in others it renders the word as Vulture.

Mr. Tristram, who has given much attention to this subject, is inclined to refer the word *ayah* to the Common

Kite, which was once so plentiful in this country, and is now nearly extinct; and *dayah* to the Black Kite. He founds this distinction on the different habits of the two species, the Common or Red Kite being thinly scattered, and being in the habit of soaring into the air at very great heights, and the latter being very plentiful and gregarious.

We will first take the Red Kite.

This bird is scattered all over Palestine, feeding chiefly on the smaller birds, mice, reptiles, and fish. In the capture of fish the Kite is almost as expert as the osprey, darting from a great height into the water, and bearing off the fish in its claws. The wings of this bird are very long and powerful, and bear it through the air in a peculiarly graceful flight. It is, indeed, in consequence of this flight that it has been called the Glede, the word being derived from its gliding movements.

The sight of this bird is remarkably keen and piercing, and, from the vast elevation to which it soars when in search of food, it is able to survey the face of the country beneath, and to detect the partridge, quail, chicken, or other creature that will serve it for food. This piercing sight and habit of soaring render the passage in Job peculiarly appropriate to this species of Kite, though it does not express the habits of the other. Should the Kite suspect danger when forced to leave its nest, it escapes by darting rapidly into the air, and soaring at a vast height above the trees among which its home is made. From that elevation it can act as a sentinel, and will not come down again until it is assured of safety.

Of the habits of the BLACK KITE Mr. Tristram gives an admirable description. ‘The habits of the bird bear out the allusion in Isa. xxxiv. 15, for it is, excepting during the winter three months, so numerous every-



THE KITE, OR VULTURE OF SCRIPTURE.

‘There is a path which no fowl knoweth, and which the vulture’s eye hath not seen,’
JOB xxviii. 7.

where in Palestine as to be almost gregarious. It returns about the beginning of March, and scatters itself over the whole country, preferring especially the neighbourhood of valleys, where it is a welcome and unmolested guest. It does not appear to attack the

poultry, among whom it may often be seen feeding on garbage. It is very sociable, and the slaughter of a sheep at one of the tents will soon attract a large party of black kites, which swoop down regardless of man and guns, and enjoy a noisy scramble for the refuse, chasing each other in a laughable fashion, and sometimes enabling the wily raven to steal off with the coveted morsel during their contentions. It is the butt of all the smaller scavengers, and is evidently most unpopular with the crows and daws, and even rollers, who enjoy the amusement of teasing it in their tumbling flight, which is a manœuvre most perplexing to the kite.'

The same writer proceeds to mention that the Black Kite, unlike the red species, is very careless about the position of its nest, and never even attempts to conceal it, sometimes building it in a tree, sometimes on a rock-ledge, and sometimes in a bush growing on the rocks. It seems indeed desirous of making the nest as conspicuous as possible, and hangs it all over with bits of cloth, strips of bark, wings of birds, and even the cast skins of serpents.

Another species is sometimes called the Black Kite from the dark hue of its plumage, but ought rather to retain the title of Egyptian Kite. Unlike the black kite, this bird is a great thief, and makes as much havoc among poultry as the red kite. It is also a robber of other birds, and if it should happen to see a weaker bird with food, it is sure to attack and rob it. Like the black kite, it is fond of the society of man, and haunts the villages in great numbers, for the purpose of eating the offal, which in Oriental towns is simply flung into the streets to be devoured by the dogs, vultures, kites,

and other scavengers, without whom no village would be habitable for a month.



THE PEREGRINE FALCON, OR GLEDE OF SCRIPTURE.

'And the glede, and the kite, and the vulture after his kind.'—DEUT. xiv. 13.

Whether the word *raah*, which is translated as Glade in Deut. xiv. 13, among the list of birds which may not be eaten, means one of these species of Kite, or a bird of a

different group, is a very doubtful point. This is the only passage in which the word occurs, and we have but small grounds for definitely identifying it with any one species. The Hebrew Bible retains the word *Glede*, but affixes a mark of doubt to it, and several commentators are of opinion that the word is a wrong reading of *dayah*, which occurs in the parallel passage in Lev. xi. 14. The reading of the Septuagint follows this interpretation, and renders it as Vulture in both cases. Buxtorf translates the word *raah* as Rook, but suggests that *dayah* is the correct reading.

Accepting, however, the word *raah*, we shall find that it is derived from a root which signifies sight or vision, especially of some particular object, so that a piercing sight would therefore be the chief characteristic of the bird, which, as we know, is one of the attributes of the Kites, together with other birds of prey, so that it evidently must be classed among the group with which we are now concerned. It has been suggested that, granting the *raah* to be a species distinct from the *dayah*, it is a collective term for the larger falcons and buzzards, several species of which inhabit Palestine, and are not distinctly mentioned in the Bible.

Several species of buzzard inhabit the Holy Land, and there is no particular reason why they should be mentioned except by a collective name. Some of the buzzards are very large birds, and though their wings are short when compared with those of the vultures and eagles, the flight of the bird is both powerful and graceful. It is not, however, remarkable for swiftness, and never was employed, like the falcon, in catching other birds, being reckoned as one of the useless and cowardly birds

of prey. In consonance with this opinion, to compare a man to a buzzard was thought a most cutting insult.

As a general rule, it does not chase its prey like the eagles or the large-winged falcons, but perches on a rock or tree, watches for some animal on which it can feed, pounces on it, and returns to its post, the whole movements being very like those of the flycatcher. This sluggishness of disposition, and the soft and almost owl-like plumage, have been the means of bringing the bird into contempt among falconers.

As to the large falcons, which seem to be included in the term *raah*, the chief of them is the Peregrine Falcon, which is tolerably common in the Holy Land. In his 'Land of Israel,' Mr. Tristram gives several notices of this bird, from which we may take the following picture from a description of a scene at Endor. 'Dreary and desolate looked the plain, though of exuberant fertility. Here and there might be seen a small flock of sheep or herd of cattle, tended by three or four mounted villagers, armed with their long firelocks, and pistols and swords, on the watch against any small party of marauding cattle-lifters.

'Griffon vultures were wheeling in circles far over the rounded top of Tabor; and here and there an eagle was soaring beneath them in search of food, but at a most inconvenient distance from our guns. Harriers were sweeping more rapidly and closely over the ground, where lambs appeared to be their only prey; and a noble peregrine falcon, which in Central Palestine does not give place to the more eastern lanner, was perched on an isolated rock, calmly surveying the scene, and permitting us to approach and scrutinize him at our leisure.'

The habit of perching on the rock, as mentioned above, is very characteristic of the Peregrine Falcon, who loves the loftiest and most craggy cliffs, and makes



THE LANNER FALCON.

its nest in spots which can only be reached by a bold and experienced climber. The nests of this bird are never built in close proximity, the Peregrine preferring

to have its home at least a mile from the nest of any other of its kinsfolk. Sometimes it makes a nest in lofty trees, taking possession of the deserted home of some other bird ; but it loves the cliff better than the tree, and seldom builds in the latter when the former is attainable.

In the passage from the ‘ Land of Israel ’ is mentioned the LANNER FALCON, another of the larger falcons to which the term *raah* may have been applied.

This bird is much larger than the Peregrine Falcon, and, indeed, is very little less than the great gerfalcon itself. It is one of the birds that were reckoned among the noble falcons ; and the female, which is much larger and stronger than the male, was employed for the purpose of chasing the kite, whose long and powerful wings could not always save it from such a foe.

Although the Lanner has been frequently mentioned among the British birds, and the name is therefore familiar to us, it is not even a visitor of our island. The mistake has occurred by an error in nomenclature, the young female Peregrine Falcon, which is much larger and darker than the male bird, having been erroneously called by the name of Lanner.

In the illustration, a pair of Lanner Falcons are depicted as pursuing some of the rock-pigeons which abound in Palestine, the attitudes of both birds being taken from life.

VII.

THE HAWK.

The Netz or Hawk—Number of species probably grouped under that name—Rare occurrence of the word—The Sparrow-Hawk and its general habits—Its place of nesting—The Kestrel, or Wind-hover—Various names by which it is known in England—Its mode of feeding and curious flight—The Hariers—Probable derivation of the name—Species of Harier known to inhabit Palestine—Falconry apparently unknown to the ancient Jews.

THERE is no doubt that a considerable number of species are grouped together under the single title Netz, or Hawk, a word which is rightly enough translated. That a great number of birds should have been thus confounded together is not surprising, seeing that even in this country and at the present time, the single word Hawk may signify any one of at least twelve different species. The various falcons, the hariers, the kestrel, the sparrowhawk, and the hobbies, are one and all called popularly by the name of Hawk, and it is therefore likely that the Hebrew word Netz would signify as many species as the English word Hawk. From them we will select one or two of the principal species.

In the first place, the word is of very rare occurrence. We only find it three times. It first occurs in Lev. xi. 16, in which it is named, together with the eagle, the ossifrage, and many other birds, as among the unclean creatures, to eat which was an abomination. It is next found in the parallel passage in Deut. xiv. 15, neither of which portions of Scripture need be quoted at length.

That the word *netz* was used in its collective sense is

very evident from the addition which is made to it in both cases. The Hawk, 'after its kind,' is forbidden, showing therefore that several kinds or species of Hawk were meant. Indeed, any specific detail would be quite needless, as the collective term was quite a sufficient indication, and, having named the vultures, eagles, and larger birds of prey, the simple word *netz* was considered by the sacred writer as expressing the rest of the birds of prey.

We find the word once more in that part of the Bible to which we usually look for any reference to natural history. In Job xxxix. 26, we have the words, 'Doth the hawk fly by thy wisdom, and turn [or stretch] her wings towards the south?' The precise signification of this passage is rather doubtful, but it is generally considered to refer to the migration of several of the Hawk tribe. That the bird in question was distinguished for its power of flight is evident from the fact that the sacred poet has selected that one attribute as the most characteristic of the *Netz*.

Taking first the typical example of the Hawks, we find that the SPARROW-HAWK is plentiful in Palestine, finding abundant food in the smaller birds of the country. It selects for its nest just the spots which are so plentiful in the Holy Land, *i.e.* the crannies of rocks and the tops of tall trees. Sometimes it builds in deserted ruins, but its favourite spot seems to be the lofty tree-top, and, in default of that, the rock-crevice. It seldom builds a nest of its own, but takes possession of that which has been made by some other bird. Some ornithologists think that it looks out for a convenient nest, say of the crow or magpie, and then ejects the rightful owner.

I am inclined to think, however, that it mostly takes possession of a nest that is already deserted, without running the risk of fighting such enemies as a pair of angry magpies. This opinion is strengthened by the fact that the bird resorts to the same nest year after year.

It is a bold and dashing bird, though of no great size, and when wild and free displays a courage which it seems to lose in captivity. As is the case with so many of the birds, the female is much larger than her mate, the latter weighing about six ounces, and measuring about a foot in length, and the former weighing above nine ounces, and measuring about fifteen inches in length.

The most plentiful of the smaller Hawks of Palestine is the COMMON KESTREL. This is the same species with which we are so familiar in England under the names of Kestrel, Wind-hover, and Stannel Hawk.

It derives its name of Wind-hover from its remarkable habit of hovering, head to windward, over some spot for many minutes together. This action is always performed at a moderate distance from the ground ; some naturalists saying that the Hawk in question never hovers at an elevation exceeding forty feet, while others, myself included, have seen the bird hovering at a height of twice as many yards. Generally, however, it prefers a lower distance, and is able by employing this manœuvre to survey a tolerably large space beneath. As its food consists in a very great measure of field-mice, the Kestrel is thus able by means of its telescopic eyesight to see if a mouse rises from its hole ; and if it should do so, the bird drops on it and secures it in its claws.

Unlike the sparrow-hawk, the Kestrel is undoubtedly gregarious, and will build its nest in close proximity to the habitations of other birds, a number of nests being often found within a few yards of each other. Mr. Tristram remarks that he has found its nest in the



KESTREL.

'Doth the hawk fly by thy wisdom?'—JOB xxxix. 26.

recesses of the caverns occupied by the griffon vultures, and that the Kestrel also builds close to the eagles, and is the only bird which is permitted to do so. It also builds in company with the jackdaw.

Several species of Kestrel are known, and of them at least two inhabit the Holy Land, the second being a

much smaller bird than the Common Kestrel, and feeding almost entirely on insects, which it catches with its claws, the common chafers forming its usual prey. Great numbers of these birds live together, and as they rather affect the society of mankind, they are fond of building their nests in convenient crannies in the mosques or churches. Independently of its smaller size, it may be distinguished from the Common Kestrel by the whiteness of its claws.

The illustration is drawn from a sketch taken from life. The bird hovered so near a house, and remained so long in one place, that the artist fixed a telescope and secured an exact sketch of the bird in the peculiar attitude which it is so fond of assuming. After a while, the Kestrel ascended to a higher elevation, and then resumed its hovering, in the attitude which is shown in the upper figure. In consequence of the great abundance of this species in Palestine, and the peculiarly conspicuous mode of balancing itself in the air while in search of prey, we may feel sure that the sacred writers had it specially in their minds when they used the collective term *Netz*.

The Kestrel has a very large geographical range, being plentiful not only in England and Palestine, but in Northern and Southern Europe, throughout the greater part of Asia, in Siberia, and in portions of Africa. The bird, therefore, is capable of enduring both heat and cold, and, as is often the case with those creatures that are useful to man, is a perfect cosmopolitan.

It is easily trained, and, although in the old hawking days it was considered a bird which a noble could not carry, it can be trained to chase the smaller birds as successfully as the falcons can be taught to pursue the

heron. The name *Tinnunculus* is supposed by some to have been given to the bird in allusion to its peculiar cry, which is clear, shrill, and consists of a single note several times repeated.

On page 41 the reader may see a representation of a pair of *HARIER HAWKS* flying below the rock on which the peregrine falcon has perched, and engaged in pursuing one of the smaller birds.

They have been introduced because several species of Harier are to be found in Palestine, where they take, among the plains and lowlands, the place which is occupied by the other hawks and falcons among the rocks.

The name of Harier appears to be given to these birds on account of their habit of regularly quartering the ground over which they fly when in search of prey, just like hounds when searching for hares. This bird is essentially a hunter of flat and marshy lands, where it finds frogs, mice, lizards, on which it usually feeds. It does not, however, confine itself to such food, but will chase and kill most of the smaller birds, and occasionally will catch even the leveret, the rabbit, the partridge, and the curlew.

When it chases winged prey, it seldom seizes the bird in the air, but almost invariably keeps above it, and gradually drives it to the ground. It will be seen, therefore, that its flight is mostly low, as suits the localities in which it lives, and it seldom soars to any great height, except when it amuses itself by rising and wheeling in circles together with its mate. This proceeding generally takes place before nest-building. The usual flight is a mixture of that of the kestrel and the falcon, the Harier sometimes poisoning itself over some particular

spot, and at others shooting forwards through the air with motionless wings.

Unlike the falcons and most of the hawks, the Harier does not as a rule perch on rocks, but prefers to sit very upright on the ground, perching generally on a mole-hill, stone, or some similar elevation. Even its nest is made on the ground, and is composed of reeds, sedges, sticks, and similar matter, materials that can be procured from marshy land. The nest is always elevated a foot or so from the ground, and has occasionally been found on the top of a mound more than a yard in height. It is, however, conjectured that in such cases the mound is made by one nest being built upon the remains of another. The object of the elevated nest is probably to preserve the eggs in case of a flood.

At least five species of Hariers are known to exist in the Holy Land, two of which are among the British birds, namely, the Marsh Harier, sometimes called the Duck Hawk and the Moor Buzzard, and the Hen Harier, sometimes called the White Hawk, Dove Hawk, or Blue Hawk, on account of the plumage of the male, which differs greatly according to age; and the Ring-tailed Hawk, on account of the dark bars which appear on the tail of the female. All the Hariers are remarkable for the circlet of feathers that surrounds the eyes, and which resembles in a lesser degree the bold feather-circle around the eye of the owl tribe.

Before taking leave of the Hawks, it is as well to notice the entire absence in the Scriptures of any reference to falconry. Now, seeing that the art of catching birds and animals by means of Hawks is a favourite

amusement among Orientals, and knowing the unchanging character of the East, we cannot but think it remarkable that no reference should be made to this sport in the Scriptures.

It is true that in Palestine itself there would be but little scope for falconry, the rough hilly ground and abundance of cultivated soil rendering such an amusement almost impossible. Besides, the use of the falcon implies that of the horse, and the horse was scarcely ever used except for military purposes.

Had, therefore, the experience of the Israelites been confined to Palestine, there would have been good reason for the silence of the sacred writers on this subject. But when we remember that the surrounding country is well adapted for falconry, that the amusement is practised there at the present day, and that the Israelites passed so many years as captives in other countries, we can but wonder that the Hawks should never be mentioned as aids to bird-catching. We find that other bird-catching implements are freely mentioned and employed as familiar symbols, such as the gin, the net, the snare, the trap, and so forth ; but that there is not a single passage in which the Hawks are mentioned as employed in falconry.

VIII.

THE OWL.

The words which have been translated as Owl—The Côs, or Little Owl—Use made of the Little Owl in bird-catching—Habits of the bird—The Barn, Screech, or White Owl a native of Palestine—The Yanshûph, or Egyptian Eagle Owl—Its food and nest—The Lilith, or Night Monster—Various interpretations of the word—The Kippoz probably identical with the Scops Owl, or Marouf.

In various parts of the Old Testament there occur several words which are translated as OWL in the Authorized Version, and in most cases the rendering is acknowledged to be the correct one, while in one or two instances there is a difference of opinion on the subject.

In Lev. xi. 16, 17, we find the following birds reckoned among those which are an abomination, and which might not be eaten by the Israelites : ‘ The owl, and the night-hawk, and the cuckoo, and the hawk after his kind ;

‘ And the little owl, and the cormorant, and the great owl.’

Here, then, we have in close proximity the word Owl repeated three times, and the same repetition occurs in the parallel passage in Deut. xiv. Now the words which are here translated as Owl are totally different words in the Hebrew, so that if we leave them untranslated, the passages will run as follow : ‘ And the Bath-haya’annah, and the night-hawk, and the cuckoo, and the hawk after his kind ;

‘ And the Côs, and the cormorant, and the Yanshûph.’

Taking these words in order, we find in the first place that the Jewish Bible accepts the translation of the words

côs and *yanshûph*, merely affixing to them the mark of doubt. But it translates the word *bath-haya'anah* as Ostrich, without adding the doubtful mark. Now the same word occurs in several other passages of Scripture, the first being in Job xxx. 29 : ' I am a brother to dragons and a companion to owls.' In the marginal reading of the Authorized Version, which, as the reader must bear in mind, is of equal value with the text, the rendering is the same as that of the Jewish Bible, and in several other passages the same reading is followed. We therefore accept the word *bath-haya'anah* as the ostrich, and dismiss it from among the owls.

Coming now to the other words, we find in the passages already quoted the words *côs* and *yanshûph*. Both those words occur in other parts of Scripture, and evidently are the names of nocturnal birds that haunt ruins and lonely places. Taking them in order, we find the word *côs* to occur again in Ps. cii. 6 : ' I am like a pelican of the wilderness : I am like an owl of the desert.' The Psalm in which this passage occurs is a penitential prayer, in which the writer uses many of the metaphors employed by Job when lamenting his afflictions, and describes himself as left alone among men.

The simile is equally just and feasible in this case, the Owl being essentially a bird of night, and associated with solitude and gloom. The particular species which is signified by the word *côs* bears but very slightly on the subject, inasmuch as in general habits all the true Owls are very similar in hiding by day in their nests, and coming out at night to hunt for prey, their melancholy hoot, or startling shriek, breaking the silence of the night.

Still it is necessary to identify, if we can, some species with the word *côs*, and it is very likely that the Little Owl, or Boomah of the Arabs, is the bird which is signified by the word *côs*. This species is probably identical with the Little Night Owl of England. Though rare in England, it is very common in many parts of the Continent, where it is much valued by bird-catchers, who employ it as a means of attracting small birds to their traps. They place it on the top of a long pole, and carry it into the fields, where they plant the pole in the ground. This Owl has a curious habit of swaying its body backwards and forwards, and is sure to attract the notice of all the small birds in the neighbourhood. It is well known that the smaller birds have a peculiar hatred to the Owl, and never can pass it without mobbing it, assembling in great numbers, and so intent on their occupation that they seem to be incapable of perceiving anything but the object of their hatred. Even rooks, magpies, and hawks are taken by this simple device.

Whether or not the Little Owl was used for this object by the ancient inhabitants of Palestine is rather doubtful; but as they certainly did so employ decoy-birds for the purpose of attracting game, it is not unlikely that the Little Owl was found to serve as a decoy. We shall learn more about the system of decoy-birds when we come to the partridge.

The Little Owl is to be found in almost every locality, caring little whether it takes up its residence in cultivated grounds, in villages, among deserted ruins, or in places where man has never lived. As, however, it is protected by the natives, it prefers the neighbourhood of villages, and may be seen quietly perched in some favourite spot,

not taking the trouble to move unless it be approached closely. And to detect a perched Owl is not at all an easy matter, as the bird has a way of selecting some



THE LITTLE OWL.

'I am like an owl of the desert.'—Ps. cii. 6.

spot where the colours of its plumage harmonize so well with the surrounding objects that the large eyes are often the first indication of its presence. Many a time I have gone to search after Owls, and only been made aware of

them by the sharp angry snap that they make when startled.

The name *Athene*, by the way, has been given to this Owl because it is the species selected by the Greeks as the emblem of wisdom.

The common BARN OWL of England also inhabits Palestine, and if, as is likely to be the case, the word *cô's* is a collective term under which several species are grouped together, the Barn or White Owl is likely to be one of them.

Like the Little Owl, it affects the neighbourhood of man, though it may be found in ruins and similar localities. An old ruined castle is sure to be tenanted by the Barn Owl, whose nightly shrieks have so often terrified the belated wanderer, and made him fancy that the place was haunted by disturbed spirits. Such being the case in England, it is likely that in the East, where popular superstition has peopled every well with its jinn and every ruin with its spirit, the nocturnal cry of this bird, which is often called the Screech Owl from its note, would be exceedingly terrifying, and would impress itself on the minds of sacred writers as a fit image of solitude, terror, and desolation.

The Screech Owl is scarcely less plentiful in Palestine than the Little Owl, and, whether or not it be mentioned under a separate name, is sure to be one of the birds to which allusion is made in the Scriptures.

Another name now rises before us: this is the Yanshûph, translated as the Great Owl, a word which occurs not only in the prohibitory passages of Leviticus and Deuteronomy, but in the Book of Isaiah. In that

book, ch. xxxiv. ver. 10, 11, we find the following passage :
' From generation to generation it shall lie waste ; none shall pass through it for ever and ever.

' But the cormorant and the bittern shall possess it ; the owl (*yanshûph*) also and the raven shall dwell in it : and He shall stretch out upon it the line of confusion, and the stones of emptiness.' The Jewish Bible follows the same reading.

It is most probable that the Great Owl or *Yanshûph* is the EGYPTIAN EAGLE OWL, a bird which is closely allied to the great Eagle Owl of Europe, and the Virginian Eared Owl of America. This fine bird measures some two feet in length, and looks much larger than its real size, owing to the thick coating of feathers which it wears in common with all true Owls, and the ear-like feather tufts on the top of its head, which it can raise or depress at pleasure. Its plumage is light tawny.

This bird has a special predilection for deserted places and ruins, and may at the present time be seen on the very spots of which the prophet spoke in his prediction. It is very plentiful in Egypt, where the vast ruins are the only relics of a creed long passed away or modified into other forms of religion, and its presence only intensifies rather than diminishes the feeling of loneliness that oppresses the traveller as he passes among the ruins.

The European Eagle Owl has all the habits of its Asiatic congener. It dwells in places far from the neighbourhood of man, and during the day is hidden in some deep and dark recess, its enormous eyes not being able to endure the light of day. In the evening it issues from its retreat, and begins its search after prey, which

consists of various birds, quadrupeds, reptiles, fish, and even insects when it can find nothing better.

On account of its comparatively large dimensions, it is able to overcome even the full-grown hare and rabbit, while the lamb and the young fawn occasionally fall victims to its voracity. It seems never to chase any creature on the wing, but floats silently through the air, its soft and downy plumage deadening the sound of its progress, and suddenly drops on the unsuspecting prey while it is on the ground.

The nest of this Owl is made in the crevices of rocks, or in ruins, and is a very large one, composed of sticks and twigs, lined with a tolerably large heap of dried herbage, the parent Owls returning to the same spot year after year. Should it not be able to find either a rock or a ruin, it contents itself with a hollow in the ground, and there lays its eggs, which are generally two in number, though occasionally a third egg is found. The Egyptian Eagle Owl does much the same thing, burrowing in sand-banks, and retreating, if it fears danger, into the hollow where its nest has been made.

In the large illustration the two last-mentioned species are given. The Egyptian Eagle Owl is seen with its back towards the spectator, grasping in its talons a dead hare, and with ear-tufts erect is looking towards the Barn Owl, which is contemplating in mingled anger and fear the proceedings of the larger bird. Near them is perched a raven, in order to carry out more fully the prophetic words, 'the owl also and the raven shall dwell in it.'

Two more passages yet remain in which the word

Owl is mentioned, and, curiously enough, both of them are found in the Book of Isaiah, the poet-prophet, who seized with a poet's intuition on the natural objects around him, and converted the simplest and most familiar incidents into glowing imagery and powerful metaphor.

If the reader will refer to Isaiah xxxiv. 13-15, he will find the following passages, which are, in fact, a continuation of the prophecy against Idumea, which has already been quoted. 'And thorns shall come up in her palaces, nettles and brambles in the fortresses thereof: and it shall be an habitation of dragons, and a court for owls.

'The wild beasts of the desert shall also meet with the wild beasts of the island, and the satyr shall cry to his fellow; the screech owl also shall rest there, and find for herself a place of rest.

'There shall the great owl make her nest, and lay, and hatch, and gather under her shadow.'

It has been already mentioned that the word which is translated as Owl, in the first of these passages, is *bath-haya'anah*, which is generally considered to signify the ostrich. In verse 14 we come to a new word, namely, *lilith*. In the marginal reading of the Authorized Version, this word is rendered as 'night monster,' and the Jewish Bible takes nearly the same view of the word by translating it as 'a nocturnal one,' evidently basing this interpretation upon the derivation of the word. Several Hebraists have thought that the word *lilith* merely represents some mythological being, like the dread Lamia of the ancients, a mixture of the material and spiritual—too ethereal to be seen by daylight, and too gross to be

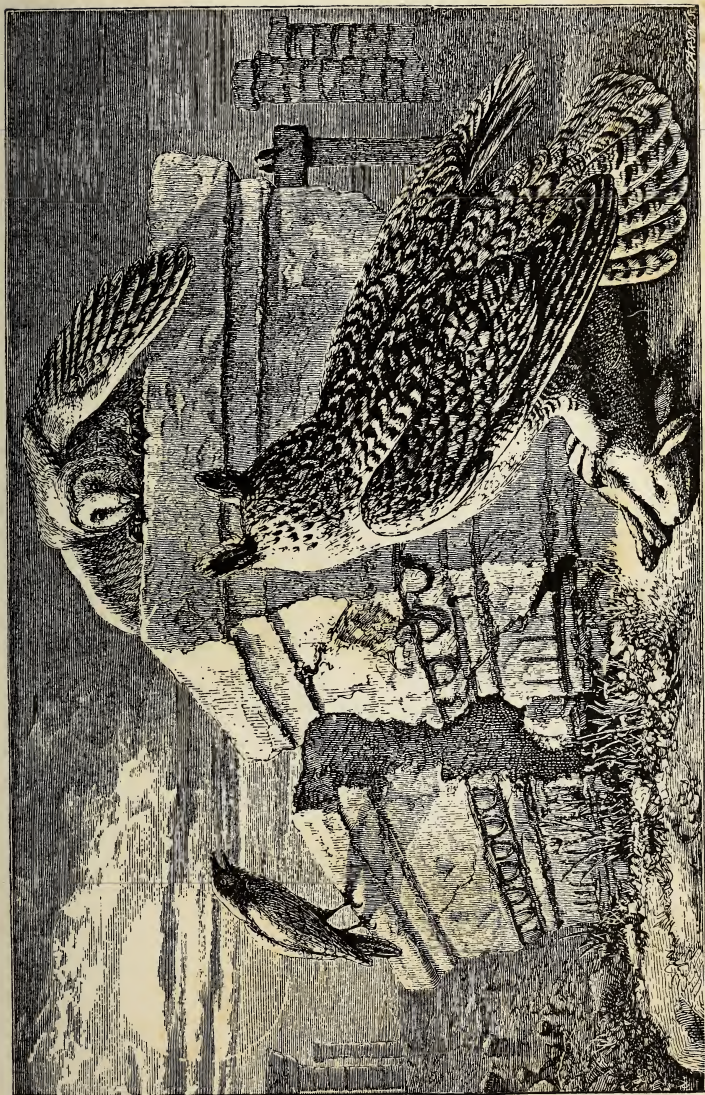
above the requirements of human food. The blood of mankind was the food of these fearful beings, and, according to old ideas, they could only live among ruins and desert places, where they concealed themselves during the day at the bottoms of wells or the recesses of rock-caverns, and stole out at night to seize on some unlucky wanderer, and suck his blood as he slept.

The reader may remember that even our very imperfect version of the 'Arabian Nights' repeatedly alludes to this belief, the evil spirit being almost invariably represented as dwelling in ruins, rocky places, and the interiors of wells.

Although it is very possible that the prophet may have referred to some of the mythological beings which were so universally supposed to inhabit deserted spots, and thus to have employed the word *lilith* as a term which he did not intend to be taken otherwise than metaphorically, it is equally possible that some nocturnal bird may have been meant, and in that case the bird in question must almost certainly have been an Owl of some kind. As to the particular species of Owl, that is a question which cannot be satisfactorily answered, especially as so many scholars find reason to doubt whether the word *lilith* represents an Owl, or indeed any ordinary inhabitant of earth. As, therefore, we have no data whereon to found a positive opinion, the question will be allowed to remain an open one.

The last word which is translated as Owl is *kippoz*, and occurs in ch. xxxiv. 15: 'There shall the great owl make her nest.'

Many Hebraists think that in this case the word *kippoz* is a mere clerical error for *kippod*, or hedgehog, and have



THE OWL,

I am a companion to owls. —JOB XXX. 29.

translated the passage accordingly. The Septuagint and the Vulgate follow this reading; Buxtorf, in his Hebrew Lexicon, translates *kippoz* as Thrush, deriving the name from the dipping character of its flight. The Jewish Bible, following several other authorities, renders the word as 'arrow-snake,' while several scholars translate it as 'darting serpent.' This interpretation, however, is scarcely tenable, as the description of the Kippoz as making its nest, laying its eggs, and gathering them under its shadow, clearly points to a bird, and not a reptile. It is very true that the boa or python snake has been seen to coil itself round a heap of its eggs, but the sacred writer could hardly have had many opportunities of seeing such an act, while the custom of a bird gathering her young under the shadow of her wings must have been perfectly familiar to him. There is, moreover, the fact that the context speaks of the vultures, so that a bird of some kind was evidently in the mind of the writer. Mr. Tristram suggests that the Kippoz might be intended for the Scops Owl, called Marouf by the Arabs, and which is very common about ruins, caves, and the old walls of towns. Its note is well represented by the word *kippoz*.

'It is a migrant, returning to Palestine in spring. It is the smallest owl in the country, being little more than seven inches in length, with long ear-tufts, and its whole plumage most delicately mottled and speckled with grey and light brown.'

This species is very plentiful on the continent of Europe, though it is rare in the British Isles. It feeds, as might be presumed from its diminutive size, on mice, small reptiles, and insects.

IX.

THE NIGHT-HAWK.

Different interpretations of the word *Tachmâs*—Probability that it signifies the Nightjar—Various names of the bird—Its remarkable jarring cry and wheeling flight—Mode of feeding—Boldness of the bird—Deceptive appearance of its size.

WE next come to the vexed question of the word *Tachmâs*, which is rendered in the Authorized Version as NIGHT-HAWK.

This word only occurs among the list of prohibited birds (see Lev. xi. 16, and Deut. xiv. 15), and has caused great controversies among commentators. Some Hebraists have thought that the male ostrich was signified by *tachmâs*, the word *bath-haya'anah* being supposed by them to signify the female ostrich. It is hardly probable, however, that the sacred writer should have mentioned separately the sexes of the same species, and we must therefore look for some other interpretation.

Going to the opposite extreme of size, some scholars have translated *tachmâs* as Swallow. This again is not a very probable rendering, as the swallow would be too small a bird to be specially named in the prohibitory list. The balance of probability seems to lie between two interpretations,—namely, that which considers the word *tachmâs* to signify the Night-hawk, and that which translates it as Owl. For both of these interpretations much is to be said, and it cannot be denied that of the two the latter is perhaps the preferable. If so, the White or

Barn Owl is probably the particular species to which reference is made.

Still, many commentators think that the Night-hawk or Nightjar is the bird which is signified by the word *tachmâs* ; and as we have already treated of the owls, we will accept the rendering of the Authorized Version. Moreover, the Jewish Bible follows the same translation, and renders *tachmâs* as Night-hawk, but affixes the mark of doubt.

It is not unlikely that the Jews may have reckoned this bird among the owls, just as is the case with the uneducated among ourselves, who popularly speak of the Nightjar as the Fern Owl, Churn Owl, or Jar Owl, the two last names being given to it on account of its peculiar cry. There are few birds, indeed, which have received a greater variety of popular names, for, besides the Goat-sucker and the five which have already been mentioned, there are the Wheel-bird and Dor-hawk, the former of these names having been given to the bird on account of its wheeling round the trees while seeking for prey, and the latter on account of the dor-beetles on which it largely feeds.

This curious variety of names is probably due to the very conspicuous character of the Nightjar, its strange, jarring, weird-like cry forcing itself on the ear of the least attentive, as it breaks the silence of night. It hardly seems like the cry of a bird, but rather resembles the sound of a pallet falling on the cogs of a rapidly-working wheel. It begins in the dusk of evening, the long, jarring note being rolled out almost interminably, until the hearer wonders how the bird can have breath enough for such a prolonged sound. The hearer may hold his

breath as long as he can, take a full inspiration, hold his breath afresh, and repeat this process over and over again, and yet the Nightjar continues to trill out its rapid notes without a moment's cessation for breath, the sound now



THE NIGHT-HAWK.

'The owl, and the night-hawk, and the cuckoo.'—DEUT. xiv. 15.

rising shrill and clear, and now sinking as if the bird were far off, but never ceasing for an instant.

This remarkable cry has caused the uneducated rustics to look upon the bird with superstitious dread, every one knowing its cry full well, though to many the bird is unknown except by its voice. It is probable that,

in the days when Moses wrote the Law, so conspicuous a bird was well known to the Jews, and we may therefore conjecture that it was one of those birds which he would specially mention by name.

The general habits of the Nightjar are quite as remarkable as its note. It feeds on the wing, chasing and capturing the various moths, beetles, and other insects that fly abroad by night. It may be seen wheeling round the branches of some tree, the oak being a special favourite, sometimes circling round it, and sometimes rising high in the air, and the next moment skimming along the ground. Suddenly it will disappear, and next moment its long trilling cry is heard from among the branches of the tree round which it has been flying. To see it while singing is almost impossible, for it has a habit of sitting longitudinally on the branch, and not across it, like most birds, so that the outline of its body cannot be distinguished from that of the bough on which it is seated. As suddenly as it began the sound ceases, and simultaneously the bird may be seen wheeling again through the air with its noiseless flight.

Being a very bold bird, and not much afraid of man, it allows a careful observer to watch its movements clearly. I have often stood close to the tree round which several Nightjars were circling, and seen them chase their prey to the ground within a yard or two of the spot on which I was standing. The flight of the Nightjar is singularly graceful. Swift as the swallow itself, it presents a command of wing that is really wonderful, gliding through the air with consummate ease, wheeling and doubling in pursuit of some active moth, whose white wings glitter against the dark background, while the sober plumage of

its pursuer is scarcely visible, passing often within a few feet of the spectator, and yet not a sound or a rustle will reach his ears. Sometimes the bird is said to strike its wings together over its back, so as to produce a sharp snapping sound, intended to express anger at the presence of the intruder. I never, however, heard this sound, though I have watched the bird so often.

Owing to the soft plumage with which it is clad, this bird, like the owls, looks larger than really is the case. It is between ten and eleven inches in length, with an expanse of wing of twenty inches, and yet weighs rather less than three ounces. Its large mouth, like that of the swallow tribe, opens as far as the eyes, and is furnished with a set of *vibrissæ* or bristles, which remind the observer of the 'whale-bone' which is set on the jaw of the Greenland whale.

X.

THE SWALLOW.

Identification of the smaller birds—Oriental indifference to natural history—Use of collective terms—The Swallow—Signification of the word *Deror*—The Bird of Liberty—Swallows and Swifts—The Sun-birds and Bee-eaters—Variety of small birds found in Palestine—The Swallows of Palestine—Swallows protected by man in various countries—Nesting of the Swallow—The Rufous Swallow and Martin—The Sis or Swift—Various species of Swift inhabiting the Holy Land—Talmudical notions of the Swift or Swallow—The leper and his offering—The cooking pot and the sacrificial vessel—Signification of the word *Tzippor-deror*.

DIFFICULT as is the identification of the mammalia mentioned in the Bible, that of the birds is much more intricate.

Some of the larger birds can be identified with tolerable certainty, but when we come to the smaller and less conspicuous species, we are at once lost in uncertainty, and at the best can only offer conjectures. The fact is, the Jews of old had no idea of discriminating between the smaller birds, unless they happened to be tolerably conspicuous by plumage or by voice. We need not be much surprised at this. The Orientals of the present day do precisely the same thing, and not only fail to discriminate between the smaller birds, but absolutely have no names for them.

By them, the shrikes, the swallows, the starlings, the thrushes, the larks, the warblers, and all the smaller birds, are called by a common title, derived from the twittering sound of their voices, only one or two of them having any distinctive titles. They look upon the birds much as persons ignorant of entomology look at a collection of moths. There is not much difficulty in discriminating between the great hawk-moths, and perhaps in giving a name to one or two of them which are specially noticeable for any peculiarity of form or colour; but when they come to the 'Rustics,' the 'Carpets,' the 'Wainscots,' and similar groups, they are utterly lost; and, though they may be able to see the characteristic marks when the moths are placed side by side, they are incapable of distinguishing them separately, and, to their uneducated eyes, twenty or thirty species appear absolutely alike.

I believe that there is no country where a knowledge of practical natural history is so widely extended as in England; and yet how few educated persons are there who, if taken along a country lane, can name the

commonest weed or insect, or distinguish between a sparrow, a linnet, a hedge-sparrow, and a chaffinch. Nay, how many are there who, if challenged even to repeat the names of twelve little birds, would be unable to do so without some consideration, much less to know them if the birds were placed before them.

Such being the case in this country, where the capability of observation is more or less cultivated in every educated person, we may well expect that a profound ignorance on the subject should exist in countries where that faculty is absolutely neglected as a matter of education. Moreover, in England we have a comparatively limited list of birds, whereas in Palestine are found nearly all those which are reckoned among British birds, and many other species besides. Those which reside in England reside also for the most part in Palestine, while the greater part of the migratory birds pass, as we might expect, into the Holy Land and the neighbouring countries.

If then we put together the two facts of an unobservant people and a vastly extended fauna, we shall not wonder that so many collective terms are used in the Scriptures, one word often doing duty for twenty or thirty species. The only plan, therefore, which can be adopted is to mention generally the birds which were probably grouped under one name, and to describe briefly one or two of the most prominent.

It is, however, rather remarkable that the song of birds does not appear to be noticed by the sacred writers. We might expect that several of the prophets, especially Isaiah, the great sacred poet, who drew so many of his images from natural objects, would have found in the song of birds some metaphor expressive of sweetness or joy.

We might expect that in the Book of Job, in which so many creatures are mentioned, the singing of birds would be brought as prominently forward as the neck clothed with thunder of the horse, the tameless freedom of the wild ass, the voracity of the vulture, and the swiftness of the ostrich. We might expect the song of birds to be mentioned by Amos, the herdman of Tekoa, who introduces into his rugged poem the roar of the old lion and the wail of the cub, the venom of the serpent hidden in the wattled wall of the herdman's hut, and the ravages of the palmer-worm among the olives. Above all, we might expect that in the Psalms there would be many allusions to the notes of the various birds which have formed such fruitful themes for the poets of later times. There are, however, in the whole of the Scriptures but two passages in which the song of birds is mentioned, and even in these only a passing allusion is made.

One of them occurs in Psalm civ. 12: 'By them (*i.e.* the springs of water) shall the fowls of the heaven have their habitation, which sing among the branches.' This passage is perhaps rendered more closely in the Jewish Bible: 'Over them dwell the fowls of the heaven; they let their voices resound (or give their voice) from between the foliage.'

The other occurs in Eccles. xii. 4: 'And the doors shall be shut in the streets, when the sound of the grinding is low, and he shall rise up at the voice of the bird, and all the daughters of music shall be brought low.' The word which is here translated as 'bird' is that which is rendered in some places as 'sparrow,' in others as 'fowl,' and in others as 'bird.' Even in these passages, as the reader will have noticed, no marks of appreciation

are employed, and we hear nothing of the sweetness, joyousness, or mournfulness of the bird's song.

We will now proceed to the words which have been translated as Swallow in the Authorized Version.

These are two in number, namely, *derôr* and *agar*. Hebraists are, however, agreed that the latter word has been wrongly applied, the translators having interchanged the signification of two contiguous words.

We will therefore first take the word *deror*. This word signifies liberty, and is well applied to the Swallow, the bird of freedom. It is remarkable, by the way, how some of the old commentators have contrived to perplex themselves about a very simple matter. One of them comments upon the bird as being 'so called because it has the liberty of building in the houses of mankind.' Another takes a somewhat similar view of the case, but puts it in a catechetical form: 'Why is the swallow called the bird of liberty? Because it lives both in the house and in the field.' It is scarcely necessary to point out to the reader that the 'liberty' to which allusion is made is the liberty of flight, the bird coming and going at its appointed times, and not being capable of domestication.

Several kinds of Swallow are known in Palestine, including the true Swallows, the martins, and the swifts, and, as we shall presently see, it is likely that one of these groups was distinguished by a separate name. Whether or not the word *deror* included other birds beside the Swallows is rather doubtful, though not at all unlikely; and if so, it is probable that any swift-winged insectivorous bird would be called by the name of Deror, irrespective of its size or colour.

The bee-eaters, for example, are probably among the number of the birds grouped together under the word *deror*, and we may conjecture that the same is the case with the sunbirds, those bright-plumed little beings that take in the Old World the place occupied by the humming-birds in the New, and often mistaken for them by travellers who are not acquainted with ornithology. One of these birds is described by Mr. Tristram as 'a tiny little creature of gorgeous plumage, rivalling the humming-birds of America in the metallic lustre of its feathers—green and purple, with brilliant red and orange plumes under its shoulders.'

In order to account for the singular variety of animal life which is to be found in Palestine, and especially the exceeding diversity of species among the birds, we must remember that Palestine is a sort of microcosm in itself, comprising within its narrow boundaries the most opposite conditions of temperature, climate, and soil. Some parts are rocky, barren, and mountainous, chilly and cold at the top, and acting as channels through which the winds blow almost continuously. The cliffs are full of holes, rifts, and caverns, some natural, some artificial, and some of a mixed kind, the original caverns having been enlarged and improved by the hand of man.

As a contrast to this rough and ragged region, there lie close at hand large fertile plains, affording pasturage for unnumbered cattle, and of a tolerably equable temperature, so that the animals which are pastured in it can find food throughout the year. Through the centre of Palestine runs the Jordan, fertilizing its banks with perpetual verdure, and ending its course in the sulphurous and bituminous waters of the Dead Sea, under whose

waves the ruins of the wicked cities are supposed to lie. Westward we have the shore of the Mediterranean with its tideless waves of the salt sea, and on the eastward of



THE RUFOUS SWALLOW AND GALILEAN SWIFT.

'The turtle, and the crane, and the swallow observe the time of their coming.'—JER. viii. 7.

the mountain range that runs nearly parallel to the sea is the great Lake of Tiberias, so large as to have earned the name of the Sea of Galilee.

Under these favourable conditions, therefore, the number of species which are found in Palestine is perhaps greater than can be seen in any other part of the earth of the same dimensions, and it seems probable that for this reason, among many others, Palestine was selected to be the Holy Land. If, for example, the Christian Church had been originated under the tropics, those who lived in a cold climate could scarcely have understood the language in which the Scriptures must necessarily have been couched. Had it, on the contrary, taken its rise in the Arctic regions, the inhabitants of the tropics and temperate regions could not have comprehended the imagery in which the teachings of Scripture must have been conveyed. But the small and geographically insignificant Land of Palestine combines in itself many of the characteristics which belong respectively to the cold, the temperate, and the hot regions of the world, so that the terms in which the sacred writings are couched are intelligible to a very great proportion of the world's inhabitants.

This being the case, we naturally expect to find that several species of the Swallow are inhabitants of Palestine, if indeed so migratory a bird can be rightly said to be an inhabitant of any one country.

The chief characteristic of the Swallow, the 'bird of freedom,' is that it cannot endure captivity, but is forced by instinct to pass from one country to another for the purpose of preserving itself in a tolerably equable temperature, moving northwards as the spring ripens into summer, and southwards as autumn begins to sink into winter. By some marvellous instinct it traces its way over vast distances, passing over hundreds of miles where

nothing but the sea is beneath it, and yet at the appointed season returning with unerring certainty to the spot where it was hatched. How it is guided no one knows ; but the fact is certain, that Swallows, remarkable for some peculiarity by which they could be at once identified, have been observed to leave the country on their migration, and to return in the following year to the identical nest whence they started.

The habits of the Swallow are much the same in Palestine as they are in England. Its habit of making its nest among the habitations of mankind is mentioned in a well-known passage of the Psalms : ‘ The sparrow hath found an house, and the swallow a nest for herself, where she may lay her young, even Thine altars, O Lord of Hosts, my King and my God ’ (Ps. lxxxiv. 3). The Swallow seems in all countries to have enjoyed the protection of man, and to have been suffered to build in peace under his roof. We find the same idea prevalent in the New World as well as the Old, and it is rather curious that the presence of the bird should so generally be thought to bring luck to a house.

In some parts of our country, a farmer would not dare to kill a Swallow or break down its nest, simply because he thinks that if he did so his cows would fail to give their due supply of milk. The connection between the milking of a cow in the field and the destruction of a Swallow’s nest in the house is not very easy to see, but nevertheless such is the belief. This idea ranks with that which asserts the robin and the wren to be the male and female of the same species, and to be under some special divine protection.

Whatever may be the origin of this superstition,

whether it be derived from some forgotten source, or whether it be the natural result of the confiding nature of the bird, the Swallow enjoys at the present day the protection of man, and builds freely in his houses, and even his places of worship. The heathen temples, the Mahometan mosques, and the Christian churches are alike inhabited by the Swallow, who seems to know her security, and often places her nest where a child might reach it.

The bird does not, however, restrict itself to the habitations of man, though it prefers them; and in those places where no houses are to be found, and yet where insects are plentiful, it takes possession of the clefts of rocks, and therein makes its nest. Many instances are known where the Swallow has chosen the most extraordinary places for its nest. It has been known to build year after year on the frame of a picture, between the handles of a pair of shears hung on the wall, on a lamp-bracket, in a table-drawer, on a door-knocker, and similar strange localities.

The swiftness of flight for which this bird is remarkable is noticed by the sacred writers. 'As the bird by wandering, as the swallow by flying, so the curse causeless shall not come' (Prov. xxvi. 2). This passage is given rather differently in the Jewish Bible, though the general sense remains the same: 'As the bird is ready to flee, as the swallow to fly away; so a causeless execration, it shall not come.' It is possible, however, that this passage may allude rather to the migration than the swiftness of the bird.

Several species of Swallow inhabit the Holy Land. There is, for example, our common SWALLOW, which is

one of the migratory species, while another, the Oriental Swallow, often remains in the warmer parts of the country throughout the year. This bird may be distinguished by the chestnut hue of the under parts.

Perhaps the most characteristic species is the RUFOUS or RUSSET SWALLOW, a bird which is exceedingly rare even in the warmer parts of Europe, but is plentiful in Palestine. It may be easily known by the chestnut red of the back just above the tail, in the spot where the white patch occurs in our house martin. The under parts are differently coloured from those of the common Swallow, being pink instead of white.

Several Martins inhabit Palestine, among which are the two species with which we are so familiar in England, namely, the HOUSE MARTIN and the SAND MARTIN. At least two other species of Martin are known to inhabit the Holy Land, but they do not call for any special notice.

Besides the word *deror*, which is acknowledged to signify the Swallow, there is another word which, by a curious transposition, has been translated as 'crane,' whereas there is little doubt that it signifies one of the Swallow tribe, and most probably represents the Swift. The word is *sis*, and occurs in two passages. The first occurs in Isa. xxxviii. 13, 14, in the well-known prayer of Hezekiah during his sickness: 'From day even to night wilt Thou make an end of me. Like a crane [*sis*], or a swallow, so did I chatter; I did mourn as a dove: mine eyes fail with looking upward.' The Jewish Bible reads the words, 'Like a chattering swallow,' affixing the mark of doubt; while the Septuagint translates the word

sis as 'Chelidon,' or Swallow, and this is probably the correct rendering of the word.

Accepting this as the true interpretation, we find that the word *sis* is very expressive of the perpetual chattering of the Swift, whose sharp, shrill cries often betray its presence while it is sailing in the air almost beyond the ken of human eyes. There is a wailing, melancholy sound about the bird's cry which makes Hezekiah's image exceedingly appropriate, and he could hardly have selected a more forcible metaphor.

The second passage occurs in Jer. viii. 7 : ' Yea, the stork in the heaven knoweth her appointed times ; and the turtle, and the crane [*sis*], and the swallow observe the time of their coming ; but My people know not the judgment of the LORD.' With regard to this passage, the Jewish Bible renders the word *sis* as Swallow, though with the mark of doubt.

Allusion is here made to the migratory habits of the Swift. There is, perhaps, no bird more conspicuous in this respect ; for whereas the other migratory birds seem to straggle, as it were, into the country, the Swifts arrive almost simultaneously, so that on one day not a Swift will be seen, and on the next the air is full of their dark, glancing forms.

Like the Swallow, the Swift haunts the neighbourhood of man, and loves to build its simple nest in the roofs of houses. Almost any hole will do for a Swift to build in, provided that it be tolerably deep ; for the bird loves darkness for its nest, though it is essentially in its habits a bird of light.

Perhaps the word 'build' is scarcely the right one, inasmuch as the nest is even more simple than that of

the sand-martin. This latter bird does indeed arrange with some regularity the feathers which compose its nest, as may be seen by a beautiful specimen obtained by Mr. Gould; whereas the Swift merely places together a quantity of hay, straw, hair, feathers, and similar materials, all of which are probably obtained from the ruins of a sparrow's nest which had occupied the hole before the Swift took possession of it.

Several species of Swift inhabit Palestine. The common Swift, with which we are so familiar, is very plentiful, and so is the ALPINE SWIFT, a bird which is rare in England, though it occasionally visits our shores. It is much larger than the common Swift, and is brown above and white below, instead of being dusky black, like the common species.

The most characteristic species is, however, the GALILEAN SWIFT. Of this kind, Mr. Tristram remarks that it is 'very like the house-martin in general appearance and size. It resides all the year in the Jordan valley, where alone it is found, living in large communities, and has a pleasing note, a gentle and melodious wail, very different from the harsh scream of the other swifts. Its nests are very peculiar, being composed generally of straw and feathers, agglutinated together by the bird's saliva, like those of the edible swallow of Eastern Asia. They are without any lining, attached to the under side of an overhanging rock. It also sometimes takes possession of the nest of the rufous swallow for its purposes. The Galilean swift has a wide range, being found in India and Abyssinia.'

It is possible that this may be the *Sis* mentioned by

Hezekiah, its soft wailing cry being used as the metaphor to express his own complaining.

As might be expected, the Talmudical writers have much to say on this bird.

For example, the offering which a leper made at the cleansing of his infirmity might be the *Tzippor-deror*, the rather quaint reason being that it was a bird with sharp scratching claws, and was therefore very appropriately offered in connection with a disease of the skin. Here we have rather a complication of terms, the word *tzippor* being used, as we shall presently see, to signify the sparrow in particular, or any little bird in general. The particular species, therefore, which is signified by the combination of the two words *tzippor-deror* is rather obscure, and the Talmudists themselves are rather uncertain about it. The interpretation of this compound word seems, however, to have been a difficulty, and the various renderings which have been suggested seem at last to have varied between the wild pigeon, or rock-dove, and the Swallow. An account of the various arguments is given by Lewysohn in his 'Zoologie des Talmuds,' page 206, and may be briefly epitomized, as follows, in favour of the Swallow, or, as we shall soon see, the Swift.

The reader may perhaps be acquainted with the legend respecting the death of Titus, how a gnat made its way through his nostril into his brain, and there grew and kept him in constant torture until he died, when, according to some writers, it had reached the size of a *Tzippor-deror*, and weighed two selaim. Others enlarged upon this story, and said that it grew as large as a wild

pigeon, and weighed two pounds. Now, as twenty-five selaim are equal to one pound, it follows that the Tzippor-deror must have been very much less than the wild pigeon, and that therefore the two birds could not have been identical.

Another reason for believing the Tzippor-deror to be a much smaller bird than the pigeon is found in a curious rule respecting the eating of certain meats. The Jews were forbidden to eat date-shells with the heathen, unless they were cooked in a vessel with an opening so small that a Tzippor-deror could not have been introduced into the pot. The reason of this curious proviso was, that if any unclean flesh, such as that of the swine, or of any animal which had been offered to idols, had been cooked in that vessel, even the date-shells would become unclean. But, if the mouth of the pot were too small for a Tzippor-deror to be passed through it, such a vessel could not have been used in cooking meat, and might therefore be assumed to be clean. Here, then, we have another proof of the small size of the bird. With regard to this argument, I find myself perplexed as to the 'date-shells.' Dates have no shells, and need no cooking, while the stones are too hard and woody to be rendered edible by any amount of cooking. Still, the word employed by Lewysohn is 'dattelschalen.'

The leper's offering was not laid on the altar, but was submitted to a peculiar manipulation on the part of the priest. Among other points of ritual, the blood had to be mixed with a certain quantity of water, which it barely discoloured, staining it of a very pale red. As the amount of water was the fourth part of a 'log,' and is defined to be equal to the contents of six hen's eggs, it

was evident that the bird whose blood would only discolour so small a volume of water must be a little one.

After giving all these details, the learned writer sums up his arguments by saying that he believes the Tzippor-dorer to be the White Swallow, which is small, and has claws so sharp that by means of them it can cling to the wall. Now this action is one of the characteristics of the Swifts, who often cling to walls for a time, and then resume their flight. They do so in preference to sitting on the ground after the fashion of the Swallow, because the great length of the wings causes the Swift to find some little difficulty in rising from a level surface. After weighing all the various arguments that have been urged on the subject, we may conclude that the Tzippor-dorer was the White, or Alpine Swift, which has been already described on page 81.

XI.

THE HOOPOE, OR LAPWING OF SCRIPTURE.

The 'Dukiphath' of Scripture—Various interpretations of the word—The Hoopoe—Its beauty and ill reputation—The unpleasant odour of its nest—Food of the Hoopoe—Its beautiful nest and remarkable gestures—A curious legend of Solomon and the Hoopoe.

In the two parallel chapters, Lev. xi. and Deut. xiv., there occurs the name of a bird which is translated in the Authorized Version, Lapwing: 'And the stork, the heron after her kind, the lapwing, and the bat.'

The Hebrew word is *dukiphath*, and various interpretations have been proposed for it, some taking it to be

the common domestic fowl, others the cock-of-the-woods, or capercailzie, while others have preferred to translate it as Hoopoe. The Jewish Bible retains the word lapwing, but adds the mark of doubt. Commentators are, however, agreed that of all these interpretations, that which renders the word as HOOPOE is the best.

There would be no particular object in the prohibition of such a bird as the lapwing, or any of its kin, while there would be very good reasons for the same injunction with regard to the Hoopoe.

In spite of the beauty of the bird, it has always had rather an ill reputation, and, whether in Europe or Asia, its presence seems to be regarded by the ignorant with a kind of superstitious aversion. This universal distaste for the Hoopoe is probably occasioned by an exceedingly pungent and disagreeable odour which fills the nest of the bird, and which infects for a considerable time the hand which is employed to take the eggs.

The nest is, moreover, well calculated for retaining any unpleasant smell, being generally made in the hollow of a tree, and having therefore but little of that thorough ventilation which is found in nearly all nests which are built on boughs and sprays.

The odour in question proceeds from a substance secreted from the tail-glands of the Hoopoe, and is not due, as was long supposed, to the food which was brought to the nest.

There was good reason for supposing that this evil odour was caused by the food, inasmuch as the Hoopoe is in the habit of raking about in very unsavoury places in search of insects. But it does not therefore follow that the insects which it finds are possessed of an evil

smell. On the contrary, some of the worst-smelling insects—notably the lace-wing fly and many of the flower-haunting hemiptera—are invariably found upon the leaves of trees and the petals of flowers ; while others which, like many of the scarab beetles, haunt the most repulsive substances, are in themselves bright, and clean, and sweet.

The food of the Hoopoe consists almost entirely of insects. They have been said to feed on earth-worms ; but this notion seems to be a mistaken one, as in captivity they will not touch an earth-worm so long as they can procure an insect. Beetles of various kinds seem to be their favourite food, and when the beetles are tolerably large—say, for example, as large as the common cockchafer and dor-beetle—the bird beats them into a soft mass before it attempts to eat them. Smaller beetles are swallowed without any ceremony. The various boring insects which make their home in decaying wood are favourite articles of diet with the Hoopoe, which digs them out of the soft wood with its long curved beak.

It has already been mentioned that the nest is usually made in the hollow of a tree. In many parts of the country, however, hollow trees cannot be found, and in that case the Hoopoe resorts to clefts in the rock, or even to holes in old ruins.

The bird is a peculiarly conspicuous one, not only on account of its boldly-barred plumage and its beautiful crest, but by its cry and its gestures. It has a way of elevating and depressing its crest, and bobbing its head up and down, in a manner which could not fail to attract the attention even of the most incurious, the whole aspect and expression of the bird varying with the raising and depressing of the crest.

Respecting this crest there is a curious old legend. As is the case with most of the Oriental legends, it introduces the name of King Solomon, who, according to Oriental notions, was a mighty wizard rather than a wise



THE HOOPOE.

king, and by means of his seal, on which was engraven the mystic symbol of Divinity, held sway over the birds, the beasts, the elements, and even over the Jinns and Afreets, *i.e.* the good and evil spirits, which are too

ethereal for the material world and too gross for the spiritual, and therefore hold the middle place between them.

On one of his journeys across the desert, Solomon was perishing from the heat of the sun, when the Hoopoes came to his aid, and flew in a dense mass over his head, thus forming a shelter from the fiery sunbeams. Grateful for this assistance, the monarch told the Hoopoes to ask for a boon, and it should be granted to them. The birds, after consulting together, agreed to ask that from that time every Hoopoe should wear a crown of gold like Solomon himself. The request was immediately granted, and each Hoopoe found itself adorned with a royal crown. At first, while their honours were new, great was the joy of the birds, who paused at every little puddle of water to contemplate themselves, bowing their heads over the watery mirror so as to display the crown to the best advantage.

Soon, however, they found cause to repent of their ambition. The golden crown became heavy and wearisome to them, and besides, the wealth bestowed on the birds rendered them the prey of every fowler. The unfortunate Hoopoes were persecuted in all directions for the sake of their golden crowns, which they could neither take off nor conceal.

At last, the few survivors presented themselves before Solomon, and begged him to rescind his fatal gift, which he did by substituting a crest of feathers for the crown of gold. The Hoopoe, however, never forgets its former grandeur, and is always bowing and bending itself as it used to do when contemplating its golden crown in the water.

XII.

THE SPARROW.

Signification of the word *Tzippor*—The bird used for the leper's sacrifice—The Sparrow upon the house-top—Architecture of the East—Proclamation from the house-tops—The Blue Thrush, its appearance and habits—Little birds exposed for sale in the market—The two Sparrows sold for a farthing—Bird-catching—The net, the snare, and the trap—The Sparrow that builds her nest in the Temple—The Tree-Sparrow—Various Sparrows that inhabit Palestine—Birds kept in cages.

WE have already discussed the signification of the compound word *tzippor-deror*, and will now take the word *tzippor* alone.

Like many other Hebrew terms, the word is evidently used in a collective sense, signifying any small bird that is not specially designated. In several portions of Scripture it is translated as Sparrow, and to that word we will at present restrict ourselves.

Much difficulty has been found in identifying the bird which is signified by this word, the various allusions not agreeing with each other. For example, in the marginal reading in Lev. xiv. 4 it is employed as a bird of sacrifice. When a leper had found that his disease had passed away, he was ordered to present himself before the priest, who would examine him, and decide whether the leprosy had really passed away or not. If he found that the man was right, a series of symbolic ceremonies had to be performed before the former leper could be restored to his place in the congregation.

These ceremonies lasted for eight days, and the first of them was the sacrificing of the Sparrow. 'Then shall the priest command to take for him that shall be cleansed two birds [*tzipporim* or sparrows] alive and clean, and cedar-wood, and scarlet, and hyssop.' One of these birds was to be sacrificed over running water, and the other to be set free, this sacrifice being analogous to that of the scape-goat.

We see in this passage that the bird in question, whatever it might be, must be one of those birds which were considered as clean and fit for food. Indeed, the very use of the word 'clean' shows that the leper was not restricted to any particular species. Had this been the case, there would have been no necessity for stipulating that the *Tzipporim* must belong to the list of *clean* birds—*i.e.* those which were permitted as food to the Israelites. Had any definite species been intended, there would have been no necessity for mentioning the word 'clean' in connection with the bird.

In the remaining ceremonies no such word is needed. There is no stipulation that the lamb to be sacrificed should be clean, or, in case the leper should be a poor man, that the doves which he offers should be clean. That the lamb should be without blemish is especially mentioned, because it would not be right to offer a maimed or diseased animal—he who presented himself before the Lord might not offer a sacrifice which cost him nothing, and therefore was no true sacrifice. But the lamb and the dove were known to be 'clean' animals, so it was useless to use the word in connexion with them. If, therefore, the words 'clean birds' (*tzipporim*) be mentioned, it is evident that the leper might select any

of the Tzipporim, provided that it be one of the species that was acknowledged to be clean.

Here, then, we have an example that the Sparrow might be a bird of sacrifice. We will now pass to Ps. cii. 5-7, in which we find that the word is used as an emblem of solitude and misery: 'By reason of the voice of my groaning, my bones cleave to my skin.'

'I am like a pelican of the wilderness: I am like an owl of the desert.'

'I watch, and am as a sparrow alone upon the house-top.'

The word which is here translated as 'Sparrow' is *tzippor*, the same which is rendered as 'bird' in Lev. xiv. 4. The Hebrew Bible more consistently uses the collective term 'bird' in both instances, and renders the passage as, 'I watch, and am as a lonely bird upon a roof.'

Now, any one who knows the habits of the Sparrow is perfectly aware that it is a peculiarly sociable bird. It is quarrelsome enough with its fellows, and always ready to fight for a stray grain or morsel of food; but it is exceedingly gregarious, assembling together in little parties, enlivening the air with its merry though unmusical twitterings.

This cosmopolitan bird is plentiful in the coast towns of Palestine, where it haunts the habitations of men with the same dauntless confidence which it displays in England. It is often seen upon roofs, or house-tops, but is no more apt to sit alone in Palestine than it is in England. On the contrary, the Sparrows collect in great numbers on the house-tops, attracted by the abundant

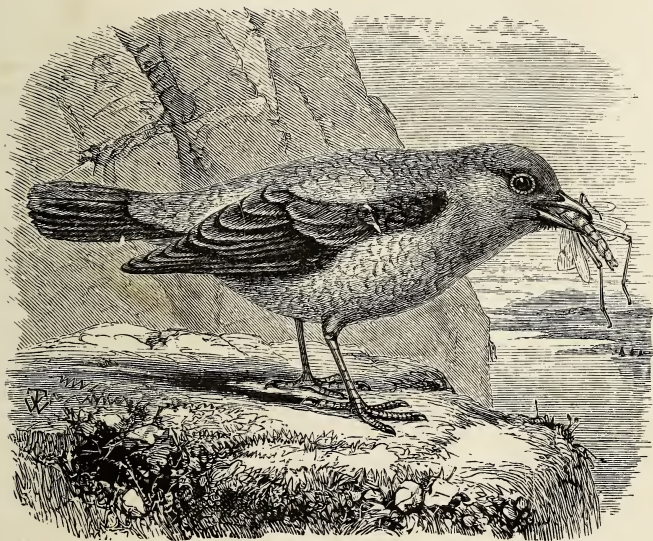
supply of food which it finds there. This requires some little explanation.

The house-tops of the East, instead of being gabled and tiled as among ourselves, to allow the rain to run off, are quite flat, and serve as terraces or promenades in the evening, or even for sleeping-places; and from the house-tops proclamations were made. See, for example, 1 Sam. ix. 25: 'And when they were come down from the high place into the city, Samuel communed with Saul upon the top of the house'—this being the ordinary place which would be chosen for a conversation. In order to keep out the heat of the mid-day sun, tents were sometimes pitched upon these flat house-tops. (See 2 Sam. xvi. 22.) Reference to the use of the house-tops as places for conversation are made in the New Testament. See, for example, Matt. x. 27: 'What I tell you in darkness, that speak ye in light; and what ye hear in the ear, that preach ye upon the house-tops.' Another passage of a similar nature occurs in Luke xii. 3: 'Therefore whatsoever ye have spoken in darkness shall be heard in the light, and that which ye have spoken in the ear in closets shall be proclaimed on the house-tops.'

These roofs, instead of being built with sloping rafters like those to which we are accustomed in this country, are made with great beams of wood laid horizontally, and crossed by planks, poles, and brushwood packed tightly together. As this roof would not keep out the rain, it is covered with a thick layer of clay mixed with straw, and beaten down as hard as possible. This covering has constantly to be renewed, as, even in the best made roofs, the heavy rains are sure to wash away some portion of the clay covering, which has to be

patched up with a fresh supply of earth. A stone roller is generally kept on the roof of each house for the purpose of making a flat and even surface.

The earth which is used for this purpose is brought from the uncultivated ground, and is full of various seeds.



THE BLUE THRUSH, OR SPARROW OF SCRIPTURE.

'I am as a sparrow alone upon the house-tops.'—Ps. cii. 7.

As soon as the rains fall, these seeds spring up, and afford food to the Sparrows and other little birds, who assemble in thousands on the house-tops, and then peck away just as they do in our own streets and farm-yards.

It is now evident that the 'sparrow alone and melancholy upon the house-tops' cannot be the lively,

gregarious Sparrow which assembles in such numbers on these favourite feeding-places. We must therefore look for some other bird, and naturalists are now agreed that we may accept the BLUE THRUSH as the particular Tzippor, or small bird, which sits alone on the house-tops. The colour of this bird is a dark blue, whence it derives its popular name. Its habits exactly correspond with the idea of solitude and melancholy. The Blue Thrushes never assemble in flocks, and it is very rare to see more than a pair together. It is fond of sitting on the tops of houses, uttering its note, which, however agreeable to itself, is monotonous and melancholy to a human ear.

In connexion with the passage already quoted, 'What ye hear in the ear, that preach ye upon the house-tops,' I will take the opportunity of explaining the passage itself, which scarcely seems relevant to the occasion unless we understand its bearings. The context shows that our Lord was speaking of the new doctrines which He had come to teach, and the duty of spreading them, and alludes to a mode of religious teaching which was then in vogue.

The long captivity of the Jews in Babylon had caused the Hebrew language to be disused among the common people, who had learned the Chaldaic language from their captors. After their return to Palestine, the custom of publicly reading the Scriptures was found to be positively useless, the generality of the people being ignorant of the Hebrew language.

Accordingly, the following modification was adopted. The roll of the Scriptures was brought out as usual, and the sacred words read, or rather chanted. After each passage was read, a doctor of the law whispered its

meaning into the ear of a Targumista or interpreter, who repeated to the people in the Chaldaic language the explanation which the doctor had whispered in Hebrew. The reader will now see how appropriate is the metaphor, the whispering in the ear and subsequent proclamation being the customary mode of imparting religious instruction.

If the reader will now turn to Matt. x. 29, he will find that the word 'sparrow' is used in a passage which has become very familiar to us. 'Are not two sparrows sold for a farthing? and one of them shall not fall on the ground without your Father.

'But the very hairs of your head are all numbered.

'Fear ye not therefore, ye are of more value than many sparrows.' The same sentences are given by St. Luke (xii. 6), in almost the same words.

Now the word which is translated as 'Sparrow' is *strouthion*, a collective word, signifying a bird of any kind. Without the addition of some epithet, it was generally used to signify any kind of small bird, though it is occasionally employed to signify even so large a creature as an eagle, provided that the bird had been mentioned beforehand. Conjoined with the word 'great,' it signifies the ostrich; and when used in connection with a word significative of running, it is employed as a general term for all cursorial birds.

In the passages above quoted it is used alone, and evidently signifies any kind of little bird, whether it be a sparrow or not. Allusion is made by our Lord to a custom, which has survived to the present day, of exposing for sale in the markets the bodies of little birds. They are stripped of their feathers, and spitted together

in rows, just as are larks in this country, and always have a large sale. Various birds are sold in this manner, little if any distinction being made between them, save perhaps in respect of size, the larger species commanding a higher price than the small birds. In fact, they are arranged exactly after the manner in which the Orientals sell their 'kabobs,' *i.e.* little pieces of meat pierced by wooden skewers.

It is evident that to supply such a market it is necessary that the birds should be of a tolerably gregarious nature, so that a considerable number can be caught at a time. Nets were employed for this purpose, and we may safely infer that the forms of the nets and the methods of using them were identical with those which are employed in the same country at the present day.

It is rather curious that the mode of bird-catching which is familiar to us under the name of bat-fowling is employed in the East. The fowlers supply themselves with a large net supported on two sticks, and, taking a lantern with them fastened to the top of a pole, they sally out at night to the places where the small birds sleep.

Raising the net on its sticks, they lift it to the requisite height, and hold the lantern exactly opposite to it, so as to place the net between the birds and the lantern. The roosting-places are then beaten with sticks or pelted with stones, so as to awaken the sleeping birds. Startled by the sudden noise, they dash from their roosts, instinctively make towards the light, and so fall into the net. Bird-catching with nets is several times mentioned in the Old Testament, but in the New the net is only alluded to as used for taking fish.

Beside the net, several other modes of bird-catching were used by the ancient Jews, just as is the case at the present day. Boys, for example, who catch birds for their own consumption, and not for the market, can do so by means of various traps, most of which are made on the principle of the noose, or snare. Sometimes a great number of hair-nooses are set in places to which the birds are decoyed, so that in hopping about many of them are sure to become entangled in the snares. Sometimes the noose is ingeniously suspended in a narrow passage which the birds are likely to traverse, and sometimes a simple fall-trap is employed.

To these nooses many allusions are made in the Scriptures. See, for example, Ps. cxxiv. 7 : ‘ Our soul is escaped as a bird (*tzippor*) out of the snare of the fowlers : the snare is broken, and we are escaped.’ Also Prov. vii. 23 : ‘ He goeth after her straightway, as an ox goeth to the slaughter . . . as a bird hasteneth to the snare, and knoweth not that it is for his life.’ There is one passage in Ecclesiastes, where both the fishing-net and the snare are mentioned in connexion with each other : ‘ For man knoweth not his time : as the fishes that are taken in an evil net, and as the birds that are caught in the snare ; so are the sons of men snared in an evil time, when it falleth suddenly upon them ’ (ix. 12).

Allusion is also made to the snare by the prophet Amos in one of the passages where his rough, homely diction rises by successive steps into sublimity : ‘ Can a bird fall in a snare upon the earth, where no gin is for him ? shall one take up a snare from the earth, and have taken nothing at all ? ’ (iii. 5).

So common was the use of the snare that it was

frequently used as a familiar image by the sacred writers. 'How long shall this man be a snare to us?' said Pharaoh's servants of Moses, through whom the waters of the sacred river had been polluted, and various other plagues had come upon the Egyptians. Idols are called snares in many parts of the Scriptures, and so is the society of the wicked. A forcible use of this image was made by Saul when he found that his daughter Michal loved David: 'And Saul said, I will give him her, that she may be a snare to him, and that the hand of the Philistines may be against him' (1 Sam. xviii. 21). His device, or snare, not only failed, but, as we learn in the succeeding chapter, verses 11-16, David was 'delivered from the snare of the fowler,' by the very means which had been employed for entrapping him.

We now pass to another division of the subject. In Ps. lxxxiv. 1-3, we come upon a passage in which the Sparrow is again mentioned: 'How amiable are Thy tabernacles, O Lord of hosts!

'My soul longeth, yea, even fainteth for the courts of the Lord; my heart and my flesh crieth out for the living God.

'Yea, the sparrow hath found an house, and the swallow a nest for herself, where she may lay her young, even Thine altars, O Lord of hosts, my King, and my God.'

It is evident that we have in this passage a different bird from the Sparrow that sitteth alone upon the house-tops; and though the same word, *tzippor*, is used in both cases, it is clear that whereas the former bird was mentioned as an emblem of sorrow, solitude, and sadness,

the latter is brought forward as an image of joy and happiness. 'Blessed are they,' proceeds the Psalmist, 'that dwell in Thy house : they will be still praising Thee. . . . For a day in Thy courts is better than a thousand. I had rather be a doorkeeper in the house of my God, than to dwell in the tents of wickedness.'



THE TREE-SPARROW, OR SPARROW OF SCRIPTURE.

'Yea, the sparrow hath found an house, where she may lay her young.'—Ps. lxxxiv. 3.

According to Mr. Tristram, this is probably one of the species to which allusion is made by the Psalmist. While inspecting the ruins in the neighbourhood of the Temple, he came upon an old wall. 'Near this gate I climbed on to the top of the wall, and walked along for

some time, enjoying the fine view at the gorge of the Kedron, with its harvest crop of little white tombs. In a chink I discovered a sparrow's nest of a species so closely allied to our own that it is difficult to distinguish it, one of the very kind of which the Psalmist sung. . . . The swallows had departed for the winter, but the sparrow has remained pertinaciously through all the sieges and changes of Jerusalem.'

The same traveller thinks that the TREE SPARROW may be the species to which the sacred writer refers, as it is even now very plentiful about the neighbourhood of the Temple. In all probability we may accept both these birds as representatives of the Sparrow which found a home in the Temple. The swallow is separately mentioned, possibly because its migratory habits rendered it a peculiarly conspicuous bird; but it is probable that many species of birds might make their nests in a place where they felt themselves secure from disturbance, and that all these birds would be mentioned under the collective and convenient term of Tzipporim.

As we are engaged upon the word Sparrow, it may be mentioned that several species of Sparrow inhabit Palestine. There is, for example, the common House Sparrow, with which we are so familiar. Then, as has just been described, there is the Tree Sparrow—a bird which is very common in some parts of England, and never seen in others.

Beside these, there is the MARSH SPARROW, or SPANISH SPARROW, which haunts the banks of the Jordan, and is found there in countless myriads. Mr. Tristram mentions that it builds so plentifully in the thorn-bushes of the Jordan valley, that he has seen the branches borne

down by the weight of the nests. The same writer, in remarking upon the difficulty, not to say impossibility, of defining the precise bird which was signified by a Hebrew word, says that, exclusive of the crow tribe, the swifts, cuckoos, rollers, kingfishers, &c., nearly one hundred and fifty species of passerine birds are known to inhabit the Holy Land, any or all of which may be signified by the word *tzippor*.

In curious contrast to the generally unobservant nature of the Oriental, and to the almost entire absence in Scripture of any allusion to the song of birds, we find that not only do the Orientals of the present day keep singing-birds in cages, but that the custom was in all probability prevalent during the days when the various Scriptural books were written. Any of my readers who are familiar—as they ought to be—with that storehouse of Oriental manners, the ‘Arabian Nights,’ will remember several allusions to birds kept in cages, some for their song, some for their beauty of plumage, and some for their powers of talking. The same custom is continued at the present day; and not only in Palestine, but in other Eastern countries, birds may be seen in cages hung outside the houses.

In two passages of the Scriptures the word ‘cage’ is mentioned, but in one case the word evidently has another meaning, and in the other the signification is open to doubt.

The first of these passages occurs in Jer. v. 27: ‘For among my people are found wicked men: they lay wait, as he that setteth snares; they set a trap, they catch men.’

‘As a cage is full of birds, so are their houses full of deceit.’

There is but little doubt that the word which is rendered here as 'cage' really signifies a trap, probably one of the basket-traps which are still employed in the East in bird-catching. One marginal reading gives the word as 'coop.' The whole of the context, however, shows that reference is made, not to keeping birds in cages, but to capturing them in traps, to which the houses of the wicked are compared.

The second mention of the word 'cage' occurs in the Revelation, where the sacred writer compares Babylon with 'a cage of every unclean bird.' The word in this case signifies 'prison,' and we cannot definitely say that it represents a cage such as we understand by the word. There is, however, a passage in the Book of Job (xli. 5) which unmistakably alludes to the custom of domesticating birds. Speaking of the leviathan and its strength, the sacred writer uses the following metaphor: 'Wilt thou play with him as with a bird, or wilt thou bind him for thy maidens?'

XIII.

THE CUCKOO.

The Cuckoo only twice mentioned in Scripture—Difficulty of identifying the Shachaph—The common species, and the Great Spotted Cuckoo—Depositing the egg—Conjectures respecting the Shachaph—Etymology of the word—The various gulls, and other sea-birds.

ONLY in two instances is the word Cuckoo found in the Authorized Version of the Bible, and as they occur in parallel passages they are practically reduced to one. In Lev. xi. 16 we find it mentioned among the birds that

might not be eaten, and the same prohibition is repeated in Deut. xiv. 15, the Jews being ordered to hold the bird in abomination.

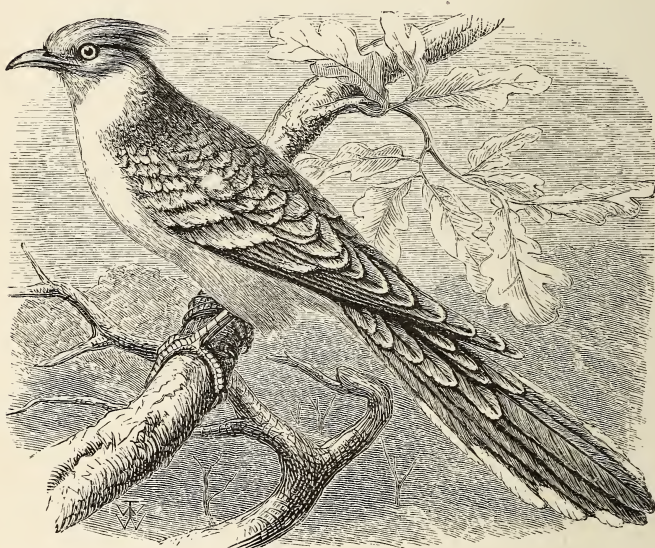
The Hebrew word is *shachaph* (the vowels to be pronounced as in 'mat'), but as to the precise bird which is signified we can but conjecture. The etymology of the word gives us but little assistance. *Shachaph* is derived from a root that signifies leanness or slenderness; but it is not very easy to base an interpretation on such grounds. In the Jewish Bible the word is rendered as 'Cuckoo,' but with the addition of the doubtful mark.

It is possible that the bird may be the *Shachaph* of the Pentateuch, for several species of Cuckoo are known to inhabit the Holy Land. One of them is the species with which we are so familiar in this country by sound, if not by sight, and which possesses in Palestine the same habits as in England. It is rather remarkable, by the way, that the Arabic name for the bird is exactly the same as ours, the peculiar cry having supplied the name. Its habit of laying its eggs in the nests of other birds is well known, together with the curious fact, that although so large a bird, measuring more than a foot in length, its egg is not larger than that of the little birds, such as the hedge-sparrow, robin, or redstart.

Besides this species, another Cuckoo inhabits Palestine, and is much more common. This is the GREAT SPOTTED CUCKOO. The birds belonging to this genus have been separated from the other Cuckoos because the feathers on the head are formed into a bold crest, in some species, such as Le Vaillant's Cuckoo, reminding the observer of the crest of the cockatoo. This fine bird measures nearly sixteen inches in length, and can be

distinguished, not only by the crested head, but by the reddish grey of the throat and chest, and the white tips of the wing and tail feathers.

This species lays its eggs in the nests of comparatively large birds, such as the rooks, crows, and magpies ;



THE GREAT SPOTTED CUCKOO.

And the owl, and the night-hawk, and the cuckoo, and the hawk after his kind.—LEV. xi. 16;
DEUT. xiv. 15.

and it is a remarkable fact, that just as the egg of the English Cuckoo is very small, so as to suit the nests of the little birds in which it is placed, that of the Great Spotted Cuckoo is as large as the average rook's egg, so as to be in proportion to the nests of the larger birds.

Many commentators believe that by the word *shachaph* was signified some species of sea-gull, or at all events some marine bird. As such birds live on fish, they would necessarily come into the class of unclean birds, and there is on that account some probability that the suggestion is a correct one.

Dr. Lewysohn has a very elaborate disquisition on the subject, in which he decides that the creature was one of the sea-birds, and derives its name of *Shachaph*, or 'attenuated,' from the meagreness of its proportions. Of the various sea-birds, he selects the petrel as the species which he thinks to have been signified by the word. This bird, as he says, is a very lean one, having many feathers, but very little flesh, so that its limbs are no larger than olives, and no one could make a meal of it. This last remark, however, tends to diminish rather than to establish his theory, as, if the bird could not be eaten, there would have been no object in prohibiting the Jews from eating it.

He further proceeds to observe that the bird is unable to scratch, and may therefore be given to a child as a playfellow, and that it is capable of being domesticated and living in a cage. There is, however, no argument here, and the theory is not a tenable one.

Mr. Tristram, with far more probability, suggests that if the bird be not one of the Cuckoos, and be really a sea-bird, it may be one of the shearwaters which live in such numbers on the sea-shore of Palestine. He mentions especially two species, the Great Shearwater and the Manx Shearwater, both of which are extremely plentiful on the coast, skimming continually over the water, and being at the present day regarded by the

Mahometans with superstitious awe, being thought to be the ever-restless souls of the condemned, who are doomed to fly backwards and forwards continually until the end of the world, clad in sombre plumage, and never permitted to rest.

Besides the shearwater, many species of gull inhabit the same coast, and it is not at all unlikely that the word *shachaph* was used in a collective sense, as we have seen to be the case with *tzippor*, and signified any of the marine birds, without aiming at distinction of species.

XIV.

THE DOVE.

Parallel between the lamb and the Dove—Derivation of the Hebrew word *Yonâh*—The Dove and the olive branch—Abram's sacrifice, and its acceptance—The sacrifice according to the law of Moses—The Dove-sellers of the Temple—Talmudical zoology—The story of Ilisch—The Dove and the raven—The Dove a type of Israel—The Beni-yonâh, or Sons of Pigeons—Home-finding instinct of the pigeon—The Oriental Dove-cotes—Voice of the Dove—Its strength of wing—The Dove's dung of Samaria—Various pigeons of Palestine—The Rock-Dove and its multitudes—The Dove and the Griffon—The Turtle-Doves of Palestine, and their appearance and habits.

In giving the Scriptural history of the Doves and Pigeons, we shall find ourselves rather perplexed in compressing the needful information into a reasonable space. There is no bird which plays a more important part, both in the Old and the New Testaments, or which is employed so largely in metaphor and symbol.

The Doves and Pigeons were to the birds what were the sheep and lambs to the animals, and, like them, derived their chief interest from their use in sacrifice.

Both the lamb and the young pigeon being emblems of innocence, they were used on similar occasions, the latter being in many instances permitted when the former were too expensive for the means of the offerer. As to the rendering of the Hebrew words which have been translated as Pigeon, Dove, and Turtle-Dove, there has never been any discussion. The Hebrew word *yonâh* has always been acknowledged to signify the Dove or Pigeon, and the word *tôr* to signify the Turtle-Dove. Generally, the two words are used in combination, so that *tôr-yonâh* signifies the Turtle-Dove.

Though the interpretation of the word *yonâh* is universally accepted, there is a little difficulty about its derivation, and its signification apart from the bird. Some have thought that it is derived from a root signifying warmth, in allusion to the warmth of its affection, the Dove having from time immemorial been selected as the type of conjugal love. Others, among whom is Buxtorf, derive it from a word which signifies oppression, because the gentle nature of the Dove, together with its inability to defend itself, cause it to be oppressed, not only by man, but by many rapacious birds.

The first passage in which we hear of the Dove occurs in the earlier part of Genesis. Indeed, the Dove and the raven are the first two creatures that are mentioned by any definite names, the word *nachosh*, which is translated as 'serpent' in Gen. iii. 1, being a collective word signifying any kind of serpent, whether venomous or otherwise, and not used for the purpose of designating any particular species.

Turning to Gen. viii. 8, we come to the first mention

of the Dove. The whole passage is too familiar to need quoting, and it is only needful to say that the Dove was sent out of the ark in order that Noah might learn whether the floods had subsided, and that, after she had returned once, he sent her out again seven days afterwards, and that she returned, bearing an olive branch (or leaf, in the Jewish Bible). Seven days afterwards he sent the Dove for the third time, but she had found rest on the earth, and returned no more.

It is not within the province of this work to treat, except in the most superficial manner, of the metaphorical signification of the Scriptures. I shall, therefore, allude but very slightly to the metaphorical sense of the passages which record the exit from the ark and the sacrifice of Noah. Suffice it to say that, putting entirely aside all metaphor, the characters of the raven and the Dove are well contrasted. The one went out, and, though the trees were at that time submerged, it trusted in its strong wings, and hovered above the watery expanse until the flood had subsided. The Dove, on the contrary, fond of the society of man, and having none of the wild, predatorial habits which distinguish the raven, twice returned to its place of refuge, before it was finally able to find a resting-place for its foot.

After this, we hear nothing of the Dove until the time of Abraham, some four hundred years afterwards, when the covenant was made between the Lord and Abram, when 'he believed in the Lord, and it was counted to him for righteousness.' In order to ratify this covenant he was ordered to offer a sacrifice, which consisted of a young heifer, a she-goat, a ram, a turtle-dove, and a young dove or pigeon. The larger animals

were severed in two, but the birds were not divided, and between the portions of the sacrifice there passed a lamp of fire as a symbol of the Divine presence.

In after days, when the promise that the seed of Abram should be as the stars of heaven for multitude had been amply fulfilled, together with the prophecy that they should be 'strangers in a land that was not theirs,' and should be in slavery and under oppression for many years, the Dove was specially mentioned in the new law as one of the creatures that were to be sacrificed on certain defined occasions.

Even the particular mode of offering the Dove was strictly defined. See Lev. i. 14-17 : 'If the burnt sacrifice for his offering to the Lord be of fowls, then he shall bring his offering of turtle-doves, or of young pigeons.

'And the priest shall bring it unto the altar, and wring off his head, and burn it on the altar; and the blood thereof shall be wrung out at the side of the altar.

'And he shall pluck away his crop with his feathers, and cast it beside the altar, on the east part, by the place of the ashes.

'And he shall cleave it with the wings thereof, but shall not divide it asunder: and the priest shall burn it upon the altar, upon the wood that is upon the fire.'

Here we have a repetition not only of the sacrifice of Abram, but of the mode in which it was offered, care being taken that the body of the bird should not be divided. There is a slight, though not very important, variation in one or two portions of this passage. For example, the wringing off the head of the bird is, literally, pinching off, and had to be done with the thumb nail; and the passage which is by some translators rendered

as the crop and the feathers, is by others translated as the crop and its contents—a reading which seems to be more consonant with the usual ceremonial of sacrifice than the other.

As a general rule, the pigeon was only sanctioned as a sacrificial animal in case one of more value could not be afforded ; and so much care was taken in this respect, that with the exception of the two ‘sparrows’ (*tzipporim*) that were enjoined as part of the sacrifice by which the cleansed leper was received back among the people (Lev. xiv. 4), no bird might be offered in sacrifice unless it belonged to the tribe of pigeons.

It was in consequence of the poverty of the family that the Virgin Mary brought two young pigeons when she came to present her new-born Son in the Temple. For those who were able to afford it, the required sacrifice was a lamb of the first year for a burnt-offering, and a young pigeon or Turtle-Dove for a sin-offering. But ‘if she be not able to bring a lamb, then she shall bring two turtles, or two young pigeons, the one for the burnt-offering and the other for a sin-offering.’ The extraordinary value which all Israelites set upon the first-born son is well known, both parents even changing their own names, and being called respectively the father and mother of Elias, or Joseph, as the case may be. If the parents who had thus attained the summit of their wishes possessed a lamb, or could have obtained one, they would most certainly have offered it in the fulness of their joy, particularly when, as in the case of Mary, there was such cause for rejoicing ; and the fact that they were forced to substitute a second pigeon for the lamb is a proof of their extreme poverty.

While the Israelites were comparatively a small and compact nation, dwelling around their tabernacle, the worshippers could easily offer their sacrifices, bringing them from their homes to the altar. But in process of time, when the nation had become a large and scattered one, its members residing at great distances, and only coming to the Temple once or twice in the year to offer their sacrifices, they would have found that for even the poor to carry their pigeons with them would have greatly increased the trouble, and in many cases have been almost impossible.

For the sake of convenience, therefore, a number of dealers established themselves in the outer courts of the Temple, for the purpose of selling Doves to those who came to sacrifice. Sheep and oxen were also sold for the same purpose, and, as offerings of money could only be made in the Jewish coinage, money-changers established themselves for the purpose of exchanging foreign money brought from a distance for the legal Jewish shekel. That these people exceeded their object, and endeavoured to overreach the foreign Jews who were ignorant of the comparative value of money and goods, is evident from the fact of their expulsion by our Lord, and the epithets which were applied to them.

As the Dove played so important a part in the Jewish worship, the Talmudical writers have investigated the subject with a curious minuteness.

In the first place, they discuss the reasons for its selection as the bird of sacrifice, and always endeavour to represent it as contrasted with the raven—all birds of the raven kind, *i.e.* the rooks, crows, magpies, and the like, being set down as cunning, deceptive, and thieving ;

while all the pigeon kind are mild, true, and loving. There is a curious story which illustrates this idea. A certain man named Ilisch, who understood the language of birds, was 'once upon a time' in captivity, when he heard the cry of a raven, which called out to him, 'Ilisch ! Ilisch ! flee ! flee !' But Ilisch said within himself, 'I believe not this lying bird.' But next came a Dove, which said the same words. Then said Ilisch, 'I believe this bird, because Israel is compared to a dove.'

Here this Ilisch, whoever he may be, referred to the Talmudical writers on the subject of the Dove, which they delighted to compare with Israel in a variety of ways, some of them being very obscure and rather far-fetched. For example, of all birds the Dove is the most persecuted, being gentle, meek, and unable to resist. She cannot fight with her beak or her claws, and has only her wings, with which she will flee away if she is able, or, if not, will fight with them. Now, as the wings are to the Dove, so is the law to Israel.

The wings are the strength of the Dove. Upheld by them she can fly for many hours, so that the birds of prey which are pursuing her cannot take her. Then comes a strange notion of the Dove's flight. When other birds are tired, they sit down and fold their wings to rest. But the tired Dove never ceases her flight ; but when one wing is fatigued, she allows it to rest, and continues her flight with the other. (So is it with Israel, who, though persecuted by the Gentiles, and deprived of half her strength, cannot be entirely crushed, but still survives and asserts herself.)

One reason that is given for the gentle disposition of the Dove is that the bird has no gall, the gall being

considered by the naturalists of old as the source and fountain of contention, the bitterness of the gall being supposed to infuse itself into the spirit. Probably on account of this anatomical peculiarity, the Dove was considered as the very pattern for married people, and the emblem of chastity, as it lives in the strictest monogamy, never desiring another mate. Unfortunately for these writers, the Raven, which is always mentioned by them in strong contrast with the Dove, is quite as remarkable for its attachment to its mate and young, and for the strictness of its monogamy, the same pair, when once mated, residing together for the whole of their lives.

Even the age of the Dove was made a matter of consideration by the Talmudists, so that in great measure the original benevolence of the Law was cramped by the restrictions which were laid upon it. As we are told by St. Paul, in Heb. ix., even under the old dispensation, without shedding of blood there was no remission of sins, and he who desired to obtain that remission was obliged to shed the blood of the sacrifice. Now, in order that poverty should be no restriction to the attainment of the greatest spiritual privileges, it was ordained that young pigeons or Turtle-Doves might be substituted for the more costly animals.

These birds cost but very little. The peasant might take them from the dove-cote, which was the appendage of most households, and he who was too poor even to have a dove-cote of his own might go to the rocky side of the ravines, and take as many young as he pleased from the myriad nests which are placed in the clefts. Thus, at any time of the year, the poorest man or woman could obtain the means of sacrifice.

But the restrictive genius which was so sternly rebuked by our Lord soon made itself felt. All these birds, in order to be fit for sacrifice, must be Beni-yonâh, *i.e.* Sons of Doves. The definition of this term is rather interesting, as it affords an excellent example of the hair-splitting character of these interpreters of the Law. According to them, a pigeon could only be ranked among the Beni-yonâh for a short period of its life, and, if it were too young or too old, it might not be offered as a sacrifice.

The test of proper age lay in the feathers. If the bird were so young that the feathers could be pulled out without drawing blood, it was considered as being below age. If, on the contrary, blood followed the feathers, but the plumage of the neck exhibited a metallic lustre, it was reckoned as having passed the age of Beni-yonâh. It might be a father, and not the son, of pigeons. When these feathers are visible, the bird changes its name, and is called Tór—a word which will be presently explained.

According to some of these old writers, the Dove was considered as having a superiority over other birds in the instinctive certainty with which it finds its way from one place to another. At the present time, our familiarity with the variety of pigeon known as the Carrier has taught us that the eye is the real means employed by the pigeon for the direction of its flight. Those who fly pigeons for long distances always take them several times over the same ground, carrying them to an increasing distance at every journey, so that the birds shall be able to note certain objects which serve them as landmarks.

Bees and wasps have recourse to a similar plan. When a young wasp leaves its nest for the first time, it

does not fly away at once, but hovers in front of the entrance for some time, getting farther and farther away from the nest until it has learned the aspect of surrounding objects. The pigeon acts in precisely the same manner, and so completely does it depend upon eyesight that, if a heavy fog should come on, the best-trained pigeon will lose its way.

The old writers, however, made up their minds that the pigeon found its way by scent, which sense alone, according to their ideas, could guide it across the sea. They were not aware of the power possessed by birds of making their eyes telescopic at will, or of the enormous increase of range which the sight obtains by elevation. A pigeon at the elevation of several hundred yards can see to an astonishing distance, and there is no need of imagining one sense to receive a peculiar development when the ordinary powers of another are sufficient to attain the object.

That dove-cotes were in use among the earlier Jews is well known. An allusion to the custom of keeping pigeons in cotes is seen in Isa. lx. 8: 'Who are these that fly as a cloud, and as the doves to their windows?' or, as the Jewish Bible translates the passage, 'as the doves to their apertures?' In this passage the sacred writer utters a prophecy concerning the coming of the world to the Messiah, the Gentiles flocking to Him as the clouds of pigeons fly homeward to their cotes.

The practice of pigeon-keeping has survived to the present day, the houses of wealthy men being furnished with separate pigeon-houses, built up of a number of earthen jars, and roofed over. Each jar is the habitation of a pair of pigeons, and the whole principle of this dove-

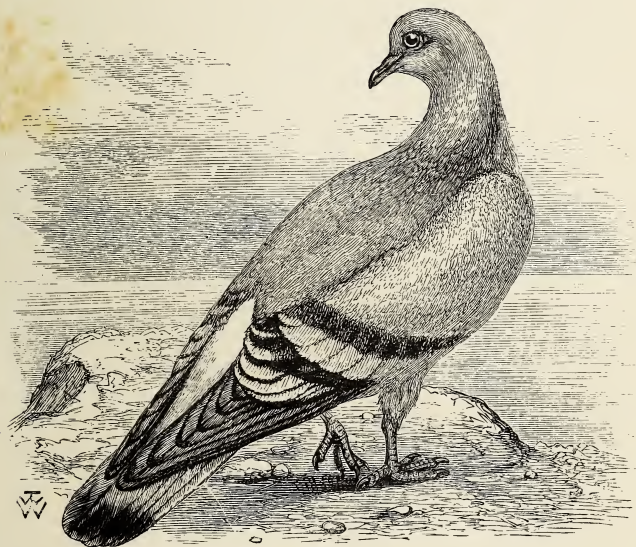
cote is exactly the same as that which was employed by the late Mr. Waterton in erecting the starling-houses in his garden and grounds. Poorer people, who cannot afford to build a separate house for the pigeons, set up jars for them in their own houses, the pigeons gaining access to their nests through the door.

The Talmudical writers have even their regulations respecting the keeping of tame pigeons. No one was allowed to do so who had not a sufficiency of ground around his house to supply food for them. According to their regulations, the pigeon-house must not be within fifty paces of cultivated ground belonging to any one except the owner of the pigeons. The reason for this prohibition was, that as the pigeon was known to be an exceedingly voracious bird, it should not feed at the expense of a neighbour. It was conventionally supposed to feed by choice in the immediate vicinity of the house, and, when it had filled its crop, to be unwilling to fly farther than was absolutely necessary.

Being so familiar with this bird, it was to be expected that the writers of the Scriptures would make many references to it. The plaintive, monotonous cooing of the pigeon is several times mentioned. For example : ‘ And Huzzab shall be led away captive, she shall be brought up, and her maids shall lead her as with the voice of doves, taboring upon their breasts ’ (Nah. ii. 7). The Jewish Bible gives this passage in another and certainly a more forcible manner : ‘ And Huzzab shall be uncovered and brought up, and her maids shall sigh as the voice of doves, drumming upon their breasts.’ Here the prophet alludes to the ancient custom of beating the breast as a sign of sorrow (a custom that survived even

in this country until a very recent date), accompanied with the moanings of distress.

The prophet Isaiah makes use of a similar metaphor : ' I did mourn as a dove : mine eyes fail with looking upward ' (xxxviii. 14). Also in chap. lix. 11 : ' We roar all like bears, and mourn sore like doves.'



THE ROCK DOVE.

O my dove, that art in the clefts of the rocks.—CANT. ii. 14.

The beauty of the bird is mentioned in many passages, several of which occur in the Song of Solomon. ' Behold, thou art fair, my love ; behold, thou art fair ; thou hast dove's eyes ' (i. 15). ' His eyes are the eyes of doves by the rivers of waters, washed with milk, and fitly set '

(v. 12). And in several other places the beloved is spoken of as a Dove, as in the following passage: 'My dove, my undefiled, is but one; she is the only one of her mother, she is the choice one of her that bare her' (vi. 9).

Allusion is made to the peculiar metallic gleam of the Dove's plumage in a well-known passage of the Psalms: 'Though ye have lien among the pots, yet shall ye be as the wings of a dove covered with silver, and her feathers with yellow gold' (Ps. lxxviii. 13).

The strong flight of the Dove is also mentioned by the Psalmist in an equally familiar passage: 'And I said, Oh that I had wings like a dove! for then would I fly away, and be at rest. Lo, then would I wander far off, and remain in the wilderness' (Ps. lv. 6, 7). It is scarcely necessary to advert to the well-known passages in which reference is made to the gentleness of the Dove.

That the pigeons which are not domesticated live in the rocks was known to the Scripture writers, who make several references to the fact.

See, for example: 'O ye that dwell in Moab, leave the cities, and dwell in the rock, and be like the dove that maketh her nest in the sides of the hole's mouth' (Jer. xlviii. 28). See also Ezek. vii. 16: 'But they that escape of them shall escape, and shall be on the mountains like doves of the valleys, all of them mourning, every one for his iniquity.'

This is an especially graphic image. The deep valleys that run between the mountain ranges are literally crowded with pigeons who have made their nests in the cavities. Several of these are so well known that they go by the name of 'Valleys of Pigeons.'

In the Song of Solomon (ii. 14) is another reference to the rock-loving propensities of the Dove: 'O my dove, that art in the clefts of the rock, in the secret places of the stairs, let me see thy countenance, let me hear thy voice.' The Jewish Bible gives a slightly different rendering, translating the word which is given as 'stairs' in the Authorized Version as 'cliffs.'

That the Doves were caught in nets is evident from a passage in Hosea (vii. 11, 12): 'Ephraim also is like a silly dove without heart: they call to Egypt, they go to Assyria.'

'When they shall go, I will spread my net upon them; I will bring them down as the fowls of the heaven; I will chastise them, as their congregation hath heard.'

There is one passage in the Old Testament about which great controversy has taken place. It occurs in 2 Kings vi. 25. When Ben-hadad besieged Samaria, and tried to reduce it by starvation, the famine was so great in the city that 'an ass's head was sold for four-score pieces of silver, and the fourth part of a cab of dove's dung for five pieces of silver.'

Objection has been taken to this passage on the score of the exceeding repulsiveness of the food. This objection, however, cannot hold good; for, although such diet must have been most repulsive, it could not have been more so than the flesh of the ass, an animal which was strictly forbidden as food, and held as unclean. Moreover, as we see in verse 29 that parents actually ate the flesh of their own children, it is evident that the mere repulsiveness of the food cannot be taken as an objection.

A far stronger objection is to be found in the fact that even all the dove-cotes of Samaria could not furnish

a sufficient quantity for food, especially as the Doves themselves must have been killed and eaten long before the people were driven to such an extremity as to eat the flesh of their own children. It is far more probable that the 'dove's-dung' was the name of a vegetable of some kind. We find a similar nomenclature in the popular names of many of our own plants, such as oxlip, cowslip, horse-tail, hart's-tongue, mouse-ear, maidenhair, and the like.

We now come to the various species of Pigeons which inhabit Palestine.

In the Holy Land are found all the species of Pigeons which inhabit England, together with one or two others. First, there is the Rock Pigeon, or Blue Rock Dove, which is acknowledged to be the origin of our domestic breeds of Pigeons, with all their infinite variety of colour and plumage. This species, though plentiful in Palestine, is not spread over the whole of the land, but lives chiefly on the coast and in the higher parts of the country. In these places it multiplies in amazing numbers, its increase being almost wholly unchecked by man, on account of the inaccessible cliffs in which it lays its eggs and nurtures its young, its only enemies being a few of the birds and beasts of prey, which can exercise but a trifling influence on these prolific birds.

In other parts of the country the Egyptian Rock Dove takes the place of the more northern species. It is a little smaller than our own Rock Dove, and has not the whitish plumage on the lower part of the back. This species is quite as numerous as the other, and builds in similar places. Mr. Tristram, while visiting the Wady

(or Valley) Seimûn, which lies near the Lake of Genesaret, witnessed an amusing example of the vast number of these Pigeons.

‘No description can give an adequate idea of the myriads of rock pigeons. In absolute clouds they dashed to and fro in the ravine, whirling round with a rush and a whirr that could be felt like a gust of wind. It was amusing to watch them upset the dignity and the equilibrium of the majestic griffon as they swept past him. This enormous bird, quietly sailing along, was quite turned on his back by the sudden rush of wings and wind.’

The writer of this description has been too modest. It is impossible to convey a better idea of the vast multitude of birds than has been given by this anecdote. We are all familiar with the clatter of Pigeons’ wings as they dart from their resting-place, and can well imagine how great must have been the multitude of birds that would fairly turn the powerful griffon-vulture on its back. This description may be advantageously compared with the passage in Isa. lx. 8: ‘Who are these that fly as a cloud?’ the sacred writer well knowing the force of his image when addressed to those who were familiar with the habits of the bird, whether it was the semi-domesticated House Pigeon or the wild Rock Dove. The Ring Dove and the Stock Dove are also found in Palestine.

These birds are taken in nets, into which they are decoyed by a very effective though cruel device.

When one of these birds is trapped or snared, it is seized by its capturers, who spare its life for the sake of using it as a decoy. They blind it by sewing its eyelids together, and then fasten it to a perch among trees. The miserable bird utters plaintive cries, and

continually flaps its wings, thus attracting others of its kind, who settle on the surrounding branches and are easily taken, their whole attention being occupied by the cries of their distressed companion.

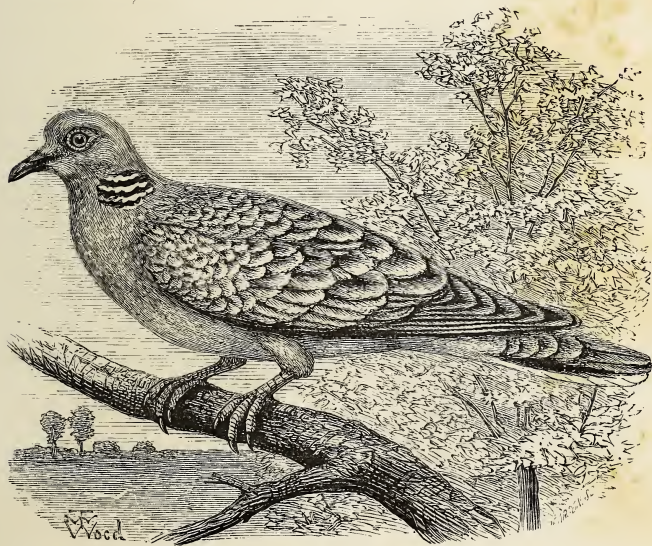
We now come to the Turtle-Doves, several of which inhabit the Holy Land; but, as they are similar in habits, we will confine ourselves to the common species, with which we are so familiar in this country. The Hebrew word which is translated as Turtle, is *tôr*, a term which is usually employed in connection with the word *yonâh*, or Dove, thus, *tôr-yonâh*. The name is evidently derived from the note of the bird.

The reader may remember that on page 114 a curious tradition has been mentioned respecting the word *tôr*; namely, that it represented the age, and not the species of a Dove. There is but little doubt, however, that the word really does represent a species, and that the Turtle-Dove is the bird signified by the word *tôr*. For example, its migratory habits are noticed in the sacred writings. See the following passage in the Song of Solomon.

‘Lo, the winter is past, the rain is over and gone; the flowers appear on the earth; the time of the singing of birds is come, and the voice of the turtle is heard in our land’ (Cant. ii. 11, 12). The prophet Jeremiah also refers to the migration of this bird: ‘Yea, the stork in the heaven knoweth her appointed times; and the turtle, and the crane, and the swallow observe the time of their coming; but my people know not the judgment of the Lord’ (viii. 7).

Beside this species, there is the Collared Turtle Dove, one variety of which is known in England as the Barbary Dove. It is a large species, measuring more

than a foot in length. Another species is the Palm Turtle, so called from its habit of nesting on palm-trees, when it is obliged to build at a distance from the habitations of man. It is a gregarious bird, several nests being generally found on one tree, and even, when it cannot find a palm, it will build among the thorns in multitudes.



THE TURTLE-DOVE.

'The voice of the turtle is heard in our land.'—CANT. ii. 12.

Like the common Dove, it is fond of the society of man, and is sure to make its nest among human habitations, secure in its knowledge that it will not be disturbed.

It is rather a small bird, being barely ten inches in length, and having no 'collar' on the neck, like the two preceding species.

XV.

POULTRY.

Poultry plentiful in Palestine at the present day—The Domestic Fowl unknown in the early times of Israel—The eating and gathering of eggs—References to Poultry in the New Testament—The egg and the scorpion—The fatted fowl of Solomon—The hen brooding over her eggs—Poultry prohibited within Jerusalem—The cock-crowing.

At the present day, poultry are plentiful both in Palestine and Syria, and that they were bred in the time of the Apostles is evident from one or two references which are made by our Lord. How long the Domestic Fowl had been known to the Jews is extremely uncertain, and we have very little to guide us in our search.

That it was unknown to the Jews during the earlier period of their history is evident from the utter silence of the Old Testament on the subject. A bird so conspicuous and so plentiful would certainly have been mentioned in the Law of Moses had it been known to the Israelites ; but, in all its minute and detailed provisions, the Law is silent on the subject.

Neither the bird itself nor its eggs are mentioned, although there are a few references to eggs, without signifying the bird which laid them. The humane provision in Deut. xxii. 6, 7, refers not to a domesticated, but to a wild bird : ‘ If a bird’s nest chance to be before thee in any tree, or on the ground, whether they be young ones, or eggs, and the dams sitting upon the young, or upon the eggs, thou shalt not take the dam with the young : but thou shalt in any wise let the dam

go, and take the young to thee ; that it may be well with thee, that thou mayest prolong thy days.'

That eggs were used for food is seen from Job vi. 6 : 'Can that which is unsavoury be eaten without salt ? or is there any taste in the white of an egg ?' So in Isa. lix. 5 : 'They hatch cockatrice' eggs, and weave the spider's web : he that eateth of their eggs dieth.'

There is another passage in the same book which refers to the gathering of eggs as mentioned in Deut. xxii. 'And my hand hath found as a nest the riches of the people : and as one gathereth eggs that are left, have I gathered all the earth' (Isa. x. 14). The well-known passage in Luke xi. 11, 12, however, evidently refers to the ordinary hen's egg, which was used then for food just as is the case at the present day : 'If a son shall ask bread of any of you that is a father, will he give him a stone ? or if he ask a fish, will he for a fish give him a serpent ?

'Or if he shall ask an egg, will he offer him a scorpion ?'

There is but one passage in the Old Testament which has ever been conjectured to refer to the Domestic Fowl. It occurs in 1 Kings iv. 22, 23, among the list of the daily provision of Solomon's household : 'And Solomon's provision for one day was thirty measures of fine flour, and threescore measures of meal,

'Ten fat oxen, and twenty oxen out of the pastures, and an hundred sheep, beside harts, and roebucks, and fallow-deer, and fatted fowl.'

Now the word which is here rendered as 'fatted fowl' is in the Hebrew, *barberim*. Judging by the etymology of the word, which is derived from a root that signifies

whiteness, or purity, it has been thought that the correct rendering would be 'fattened white' (birds). Some Hebraists have conjectured that the white birds in question were geese, this term including various white birds, swans among the number.

Many persons think that the fatted fowl mentioned in the above-quoted passage were really Domestic Fowl, which Solomon had introduced into Palestine, together with various other birds and animals, by means of his fleet. There may be truth in this conjecture, but, as there can be no certainty, we will pass from the Old Testament to the New.

We are all familiar with the passages in which the Domestic Fowl is mentioned in the New Testament. There is, for example, that touching image employed by our Lord when lamenting over Jerusalem: 'O Jerusalem, Jerusalem, thou that killest the prophets, and stonest them that are sent unto thee; how often would I have gathered thy children together, as a hen doth gather her brood under her wings, and ye would not!' The reference is evidently made to the Domesticated Fowl, which in the time of our Lord was largely bred in the Holy Land.

Some writers have taken objection to this statement in consequence of a Rabbinical law which prohibited poultry from being kept within the walls of Jerusalem, lest in their search for food they should scratch up any impurity which had been buried, and so defile the holy city. But it must be remembered that in the time of Christ Jerusalem belonged practically to the Romans, who held it with a garrison, and who, together with other foreigners, would not trouble themselves about any such

prohibition, which would seem to them, as it does to us, exceedingly puerile, not to say unjustifiable. Whether the Jews obeyed or disregarded the prohibition, it is



THE DOMESTIC FOWL.

'As a hen doth gather her brood under her wings.'—LUKE xiii. 34.

evident that it would have been binding on the Jews alone, and that all Gentiles were exempt from it. Some

commentators have even thought that the Domestic Fowl was not known in Palestine until imported by the Romans.

That the bird was common in the days of our Lord is evident from the reference to the 'cock-crowing' as a measure of time.

Even on this subject there has been much controversy, some persons thinking that the words are to be understood in their literal sense, and others that they are merely metaphorical, and refer to the divisions of time under the Romans, which were marked by the blowing of trumpets, conventionally termed cock-crowings. There is, however, no necessity to search for a metaphorical meaning when the literal interpretation is clear and intelligible. At the present day, as in all probability in the time of our Lord, the crowing of the cocks is employed as a means of reckoning time during the night, the birds crowing at certain hours with almost mechanical regularity.

XVI.

THE PEACOCK.

The foreign curiosities imported by Solomon—The word *Tucciyim* and its various interpretations—Identity of the word with the Cingalese name of the Peacock—Reasons why the Peacock should have been brought to Solomon—Its subsequent neglect and extirpation.

AMONG the many foreign objects which were imported by Solomon into Palestine, we find that the Peacock is specially mentioned. The sacred historian, after men-

tioning the ivory throne, the golden shields and targets, that all the vessels in Solomon's house were of gold, and that silver was so common as to be of no account, proceeds to give the reason for this profuse magnificence. 'For the king had at sea a navy of Tharshish with the navy of Hiram: once in three years came the navy of Tharshish, bringing gold, and silver, ivory, and apes, and peacocks' (1 Kings x. 22).

The word which is here translated as Peacock is in the Hebrew *tucciyim*, and has been rendered in various modes. The Jewish Bible accepts the same translation as our own, and does not even affix the mark of doubt. Some Hebraists have rendered the word as 'parrots, while others have tried to identify the *Tucciyim* with guinea-fowls.

In the identification of any animal, much must necessarily depend on the country in which it is found. Now, India and Ceylon are identified as the land visited by Solomon's ships. In the latter island are found gold, silver, ivory, apes, and peacocks, and it is remarkable that the Cingalese name for the Peacock is so similar to the Hebrew word, that we have every reason to believe that the word *tucciyim* or *tuyeyim* is in reality a Hebraic form of the Cingalese *tokei*. A similar resemblance of name occurs in the Hebrew and Cingalese terms for ape and elephant.

That this magnificent bird should have been one of those creatures that were imported by Solomon is almost certain. It would be imported for the same reason as the apes; namely, for the purpose of adding to the glories of Solomon's house, and no bird could have been selected which would have a more magnificent effect than



THE PEACOCK.

'Once in three years came the navy of *Tharshish*, bringing gold, and silver, ivory, and apes, and peacocks.'—1 KINGS x. 22.

the Peacock. Moreover, although unknown in Palestine, it is extremely plentiful in its native land, inhabiting the jungle by thousands, and, by a curious coincidence, being invariably most plentiful in those spots which are most frequented by tigers. In many parts of the country, great numbers of Peacocks frequent the temples, and live amicably with the sacred monkeys, passing their lives in absolute security, protected by the sanctity of the place.

Their numbers, therefore, would render them easily accessible to Solomon's envoys, who would purchase them at a cheap rate from the native dealers, while their surpassing beauty would render them sure of a sale on their arrival in Jerusalem. Indeed, their beauty made so great an impression that they are separately mentioned by the sacred chronicler, the Peacock and the ape being the only two animals that are thought worthy of enumeration.

It seems that after Solomon's death the breed of Peafowl was not kept up, owing in all probability to the troubles which beset the throne after that magnificent monarch died.

XVII.

THE PARTRIDGE.

The word *Kore* and its signification—The Partridge upon the mountains—David's simile—The Desert Partridge and its habits—Hunting the Partridge with sticks—Eggs of the Partridge—A disputed reading, and probable signification of the passage—Egg-hunting in Palestine—The various species of Partridge—The Francolin and the Sand-Grouse.

THERE is a bird mentioned in the Old Testament, which, although its name is only given twice, is a very interesting bird to all students of the Scriptures, both passages giving an insight into the manners and customs of the scarcely changing East. This is the bird called in the Hebrew *Kore*, a word which has been generally accepted as signifying some kind of Partridge. There is no doubt that, like most other Hebrew names of animated beings, the word is a collective one, signifying a considerable number of species.

The first passage occurs in 1 Sam. xxvi. 20. When David was being pursued by Saul, and had been forced to escape from the city and hide himself in the rocky valleys, he compared himself to the Partridge, which frequented exactly the same places: 'The king of Israel is come out to seek a flea, as when one doth hunt a partridge upon the mountains.'

The appositeness of this simile is perfect. The bird to which David alluded was in all probability the Desert Partridge, a species which especially haunts rocky and desert places, and even at the present day is exceedingly plentiful about the Cave of Adullam. The males, when

they think themselves unobserved, are fond of challenging, or calling to each other in a loud ringing note, a pecu-



THE GREEK PARTRIDGE.

'A partridge upon the mountains.'—1 SAM. xxvi. 20.

liarity that has earned for the bird the Hebrew name of Kore, or 'the caller.'

It is a very active bird, not taking to flight if it can

escape by means of its legs, and, when pursued or disturbed, running with great swiftness to some rocky cleft in which it may hide itself, taking care to interpose, as it runs, stones or other obstacles between itself and the object of its alarm. Thus, then, it will be seen how close was the parallel between this bird and David, who was forced, like the Partridge, to seek for refuge in the rocky caves.

But the parallel becomes even closer when we come to examine the full meaning of the passage. The Partridge is at the present day hunted on the mountains exactly as was the case in the time of David. The usual hunters are boys, who provide themselves with a supply of stout sticks about eighteen inches in length, and, armed with these, they chase the birds, hurling the sticks one after the other along the ground, so as to strike the Partridge as it runs. Generally, several hunters chase the same bird, some of them throwing the sticks along the ground, while others hurl them just above the bird, so that if it should take to flight, it may be struck as it rises into the air. By pertinaciously chasing an individual bird, the hunters tire it, and contrive to come so close that they are certain to strike it.

Rude as this mode of bird-hunting may seem, it is still employed in some parts of England, and is effective even against birds far more active on the wing than the Partridge. I have seen snipe killed in the New Forest by being hunted down with sticks. Squirrels are chased and killed in a similar manner, except that the 'bolts,' or the sticks for squirrel-hunting, are weighted with lead at one end.

The reader will now see how perfect is the image.

Driven from the city, David was forced to wander, together with the Desert Partridge, upon the hill-sides, and, like that bird, his final refuge is the rock. Then came the hunters and pursued him, driving him from place to place, as the boys hunt the Partridge, until he was weary of his life, and exclaimed in his despair, 'I shall now perish one day by the hand of Saul.'

The second passage in which the word *kore* is found occurs in Jer. xvii. 11: 'As the partridge sitteth on eggs, and hatcheth them not; so he that getteth riches, and not by right, shall leave them in the midst of his days, and at his end shall be a fool.' The marginal reading of this passage gives the sense in a slightly different form, and commences the verse as follows: 'As the partridge gathereth (young) which she hath not brought forth, so he,' &c. The Jewish Bible gives the whole passage rather differently from both these readings: 'A partridge hatching what it hath not laid (*or* borne), is he that getteth (*or* maketh) riches, and not by right (*or* judgment): he shall leave them in the midst (*or* half) of his days, and at his end shall be base.'

Taking all these readings, and comparing them with the original, with each other, and with the context, we can have but little doubt that reference is made by the prophet to the number of unborn, *i.e.* unhatched, eggs on which the Partridge sits, but which are so often taken from her before they can be hatched. Just as hunting the Partridge is an acknowledged sport among the inhabitants of the uncultivated parts of Palestine, so is searching for the eggs of the bird a regular business at the proper time of year.

The Partridges of Palestine are, like those of our own

land, exceedingly prolific birds, laying a wonderful number of eggs, more than twenty being sometimes found in a single nest. These eggs are used for food, and the consumption of them is very great, so that many a Partridge has been deprived of her expected family: she has sat upon eggs, and hatched them not.

Of these birds several species inhabit Palestine. There is, for example, the Desert Partridge, which has already been mentioned. It is beautifully, though not brilliantly, coloured, and may be known by the white spot behind the eye, the purple and chestnut streaks on the sides, and the orange bill and legs. These, however, soon lose their colour after death.

Then there is the Greek Partridge, which is even more plentiful than the preceding species, and is more widely spread. It is a large bird of its kind, being much larger than our English species, and may be known by its size, the dark red legs and beak, and the bold bars on the tides.

Mr. Tristram suggests, with much probability, that the Francolin, or Black Partridge of India, and the Sand-Grouse, may be included among the number of the birds which are included under the common name of Kore. The latter bird is extremely plentiful in Palestine, and, in all probability, was classed by the unobservant Jews with the true Partridge.

XVIII.

THE QUAIL.

Signification of the word *Selâv*—Various passages in which the word is mentioned—The locust, the stork, and the sand-grouse—Spreading the birds around the camp—Migration of the Quail—Drying the Quails for food—Modes of catching the Quail in the East—The Quail-hunters of Northern Africa—Quarrelsome nature of the bird—Quail-fighting in the East—How the Quails were brought to the Israelites.

IN one or two parts of the Old Testament is found a word which has been translated in the Authorized Version of the Bible as QUAIL.

The word is *selâv*, and in every case where it is mentioned it is used with reference to the same occurrence; namely, the providing of flesh-meat in the wilderness, where the people could find no food. As the passages remarkably bear upon each other, it will be advisable to quote them in the order in which they come.

The first mention of the *Selâv* occurs in Exod. xvi. Only a few days after the Israelites had passed the Red Sea, they began to complain of the desert land into which Moses had led them, and openly said that they wished they had never left the land of their slavery, where they had plenty to eat. According to His custom, pitying their narrow-minded and short-sighted folly, the natural result of the long servitude to which they had been subject, the Lord promised to send both bread and flesh-meat.

‘And the Lord spake unto Moses, saying,

‘I have heard the murmurings of the children of

Israel: speak unto them, saying, At even ye shall eat flesh, and in the morning ye shall be filled with bread; and ye shall know that I am the Lord your God.

‘And it came to pass, that at even the quails came up, and covered the camp’ (ver. 11–13).

The next passage records a similar circumstance, which occurred about a year afterwards, when the Israelites were tired of eating nothing but the manna, and again wished themselves back in Egypt. ‘And there went forth a wind from the Lord, and brought quails from the sea, and let them fall by the camp, as it were a day’s journey on this side, and as it were a day’s journey on the other side, round about the camp, and as it were two cubits high upon the face of the earth.

‘And the people stood up all that day, and all that night, and all the next day, and they gathered the quails: he that gathered least gathered ten homers; and they spread them all abroad for themselves round about the camp’ (Numb. xi. 31, 32).

The last passage in which Quails are mentioned occurs in the Psalms. In Ps. cv. are enumerated the various wonders done on behalf of the Israelites, and among them is specially mentioned this gift of the Quails and manna. ‘The people asked, and He brought quails, and satisfied them with the bread of heaven’ (ver. 40).

We now have to ask ourselves what the word *selâv* really means. Some commentators have thought that it signified a species of locust, insects which travel in vast multitudes, and are always carried with the wind, thus agreeing with the statement that the Selavim were

brought by the wind. Others have imagined that the Selavim were flying-fish, blown on shore as they rose



THE QUAIL.

The people asked, and He brought quails.—Ps. cv. 40.

from the sea after their fashion. Putting aside other reasons against these interpretations, the Psalms contain

a passage which effectually contradicts them, and proves that the *Selâv* was a bird of some kind.

‘He had commanded the clouds from above, and opened the doors of heaven,

‘And had rained down manna upon them to eat, and had given them of the corn of heaven.

‘Man did eat angels’ food: He sent them meat to the full.

‘He caused an east wind to blow in the heaven; and by His power He brought in the south wind.

‘He rained flesh also upon them as dust, and feathered fowls like as the sand of the sea’ (Ps. lxxviii. 23–27).

From this passage it is evident that the *Selavim* which were sent together with the manna were birds of some kind—‘fowls of wing,’ according to the literal sense of the Hebrew; so that the theory that they were insects or fish must be dismissed as untenable. The question now remains, with what species of bird are we to identify the *Selâv*?

Respecting this question, there has been great discussion, chiefly arising from the fact that the various commentators endeavoured to show that the *Selâv* was not the Quail, but some other bird. Some, for example, take it to be the white stork, which is very plentiful in Palestine, and sometimes flies in such numbers that the sky is darkened as the winged host passes by. They base this supposition on the stature of the bird, which is so tall that it stands about ‘two cubits high upon the face of the earth.’ So it does, but this is a very insufficient reason for translating the word *selâv* as ‘stork.’

In the first place, the words ‘as it were two cubits high upon the face of the earth’ certainly do not refer

to the stature of the individual birds. They are popularly taken to signify that the earth was covered with the bodies of the Selavim to the depth of three feet.

This, however, can hardly have been the fact, as in that case they would have utterly overwhelmed the whole camp, and crushed the tents by their weight. Moreover, there would have been no need of gathering them up, as they would have lain so thickly on the ground that the only trouble would have been to make a passage through them. It is not very easy to force a passage through snow a yard in depth, while to do so through the same depth of birds would have been almost impossible.

Neither could the Israelites have 'spread them all abroad for themselves round about the camp.' If the Selavim lay to the depth of a yard 'as it were a day's journey on this side, and a day's journey on the other side of the camp,' *i.e.* some eight or ten miles all round it, there would have been no space whereon the birds could have been spread. The sentence in question has a totally different signification, and refers to the height from the ground at which the birds fly. Taken in this sense, the whole passage falls into harmony, whereas in any other it involves a difficulty.

If the ordinary interpretation of *selâv* by 'Quail' be accepted, the description is exactly correct. The Quails fly in vast flocks, and, being weak-winged birds, never fly against the direction of the wind. They will wait for days until the wind blows in the required direction, and will then take wing in countless multitudes; so that in an hour or two a spot on which not a Quail could be seen is covered with them.

On account of their short wings, they never rise to any great height, even when crossing the sea, while on and they fly at a very low elevation, merely skimming over the ground, barely a yard or 'two cubits high upon the face of the earth.' We may now see how needless it is to attribute the two cubits to the stature of the bird, or to the depth at which they lay on the ground.

There are other reasons why the Selâv could not be any species of stork. In the first place, all the stork tribe are included among the list of unclean birds, and it is not likely that the Almighty would have neutralized His own edicts by providing food which the Israelites were forbidden to eat. In the next place, even had the flesh of the stork been lawful, it is of so unpleasant a nature that the people could not have eaten it. For similar reasons we may dismiss the theories which consider the Selâv to be a goose or water-fowl of any kind.

Some persons have thought that the sand-grouse is the Selâv. In the first place, the flesh of this bird is hard, tasteless, and disliked by those who have tried it; so that the Israelites would not have been tempted to eat it. In the next, it is a strong-winged and swift-footed bird, and would not have satisfied the required conditions. It flies high in the air, instead of merely skimming over the ground, and when it alights is fresh and active, and cannot easily be caught. The Quail, on the contrary, after it has flown for any distance, is so completely tired out that when it alights it crouches to the earth, and will allow itself to be picked up by hand. It has even been trodden to death under a horse's feet.

Moreover, the flesh of the Quail is peculiarly excellent, and would be a great temptation to men who had passed so long a time without eating animal food. Another corroboration of the identity of the Quail and the Selâv is to be found in the mode in which the flesh is prepared at the present day. As soon as the birds have arrived, they are captured in vast multitudes, on account of their weariness. Many are consumed at once, but great numbers are preserved for future use by being split and laid out to dry in the sun, precisely as the Israelites are said to have spread out the Selavim 'all abroad for themselves round about the camp.'

It is rather remarkable that the Arabs of the present day use a word almost exactly resembling *selâv* to represent the Quail. The word is *salwa*, given by one of the older writers on the subject as *selaw*.

Accepting, therefore, the Selâv and Quail to be identical, we may proceed to the description of the bird.

It is small, plump, and round-bodied, with the head set closely on the shoulders. Owing to this peculiarity of form, it has its Arab name, which signifies plumpness or fatness. The wings are pressed closely to the body, and the tail is pointed, very short, and directed downwards, so that it almost appears to be absent, and the bird seems to be even more plump than really is the case.

Several modes of capturing these birds are still practised in the East, and were probably employed, not only on the two occasions mentioned in Exodus and Numbers, but on many others of which the Scriptural narrative takes no notice. One very simple plan is, for the hunters to select a spot on which the birds are assembled,

and to ride or walk round them in a large circle, or rather in a constantly diminishing spiral. The birds are by this process driven closer and closer together, until at the last they are packed in such masses that a net can be thrown over them, and a great number captured in it.

Sometimes a party of hunters unite to take the Quails, and employ a similar manœuvre, except that, instead of merely walking round the Quails, they approach simultaneously from opposite points, and then circle round them until the birds are supposed to be sufficiently packed. At a given signal they all converge upon the terrified birds, and take them by thousands at a time.

In Northern Africa these birds are captured in a very similar fashion. As soon as notice is given that a flight of Quails has settled, all the men of the village turn out with their great burnouses or cloaks. Making choice of some spot as a centre, where a quantity of brushwood grows or is laid down, the men surround it on all sides, and move slowly towards it, spreading their cloaks in their outstretched hands, and flapping them like the wings of huge birds. Indeed, when a man is seen from a little distance performing this act, he looks more like a huge bat than a human being.

As the men gradually converge upon the brushwood, the Quails naturally run towards it for shelter, and at last they all creep under the treacherous shade. Still holding their outspread cloaks in their extended hands, the hunters suddenly run to the brushwood, fling their cloaks over it, and so enclose the birds in a trap from which they cannot escape. Much care is required in

this method of hunting, lest the birds should take to flight, and so escape. The circle is therefore made of very great size, and the men who compose it advance so slowly that the Quails prefer to use their legs rather than their wings, and do not think of flight until their enemies are so close upon them that their safest course appears to be to take refuge in the brushwood.

Boys catch the Quails in various traps and springes, the most ingenious of which is a kind of trap, the door of which overbalances itself by the weight of the bird.

By reason of the colour of the Quail, and its inveterate habit of keeping close to the ground, it easily escapes observation, and even the most practised eye can scarcely distinguish a single bird, though there may be hundreds within a very small compass. Fortunately for the hunters, and unfortunately for itself, it betrays itself by its shrill whistling note, which it frequently emits, and which is so peculiar that it will at once direct the hunter to his prey.

This note is at the same time the call of the male to the female and a challenge to its own sex. Like all the birds of its group, the Quail is very combative, and generally fights a battle for the possession of each of its many mates. It is not gifted with such weapons of offence as some of its kinsfolk, but it is none the less quarrelsome, and fights in its own way as desperately as the game-cock of our own country.

Indeed, in the East, it is used for exactly the same purpose as the game-cock. Battles between birds and beasts, not to say men, are the common amusement with Oriental potentates, and, when they are tired of watching the combats of the larger animals, they have Quail-fights

in their own chambers. The birds are selected for this purpose, and are intentionally furnished with stimulating food, so as to render them even more quarrelsome than they would be by nature. Partridges are employed for the same cruel purpose; and as both these birds are easily obtained, and are very pugnacious, they are especially suited for the sport.

Two passages occur in the Scriptures which exactly explain the mode in which the Quails were sent to the Israelites. The first is in Ps. lxxviii. 26. The Psalmist mentions that the Lord 'caused an east wind to blow in the heaven, and by His power He brought in the south wind.' Here, on examining the geographical position of the Israelites, we see exactly how the south-east wind would bring the Quails.

The Israelites had just passed the Red Sea, and had begun to experience a foretaste of the privations which they were to expect in the desert through which they had to pass. Passing northwards in their usual migrations, the birds would come to the coast of the Red Sea, and there would wait until a favourable wind enabled them to cross the water. The south-east wind afforded them just the very assistance which they needed, and they would naturally take advantage of it.

It is remarkable how closely the Scriptural narrative agrees with the habits of the Quail, the various passages, when compared together, precisely coinciding with the character of the bird. In Exod. xvi. 13 it is mentioned that 'at even the quails came up and covered the camp.' Nocturnal flight is one of the characteristics of the Quail. When possible, they invariably fly by night, and in this manner escape many of the foes which would make great

havoc among their helpless columns if they were to fly by day.

The identity of the Selâv with the common Quail is now seen to be established. In the first place, we have the name still surviving in the Arabic language. Next, the various details of the Scriptural narrative point so conclusively to the bird, that even if we were to put aside the etymological corroboration, we could have but little doubt on the subject. There is not a detail which is not correct. The gregarious instinct of the bird, which induces it to congregate in vast numbers; its habit of migration; its inability to fly against the wind, and the necessity for it to await a favourable breeze; its practice of flying by night, and its custom of merely skimming over the surface of the ground; the ease with which it is captured; the mode of preserving by drying in the sun, and the proverbial delicacy of its flesh, are characteristics which all unite in the Quail.

Before closing our account of the Quail, it will be as well to devote a short space to the nature of the mode by which the Israelites were twice fed. Commentators who were unacquainted with the natural history of the bird have represented the whole occurrence as a miraculous one, and have classed it with the division of the Red Sea and of the Jordan, with the various plagues by which Pharaoh was induced to release the Israelites, and with many other events which we are accustomed to call miracles.

In reality, there is scarcely anything of a miraculous character about the event, and none seems to have been claimed for it. The Quails were not created at the

moment expressly for the purpose of supplying the people with food, nor were they even brought from any great distance. They were merely assisted in the business on which they were engaged, namely, their migration or customary travel from south to north, and waiting on the opposite side of the narrow sea for a south-east wind. That such a wind should blow was no miracle. The Quails expected it to blow, and without it they could not have crossed the sea. That it was made to blow earlier than might have been the case is likely enough, but that is the extent of the miraculous character of the event. Taking the word in its ordinary sense, no miracle was wrought, simply because none was wanted. Granting to the fullest extent that He who arranged the course of the world can alter His arrangements as easily as He made them, we cannot but see that in this case no alteration was needed, and that, in consequence, none was made.

XIX.

THE RAVEN.

Signification of the word *Oreb*—The Raven tribe plentiful in Palestine—The Raven and the Dove—Elijah and the Ravens—Various explanations of the circumstance—Feeding the young Ravens—Luis of Grenada's sermon—The white Raven of ancient times—An old legend—Reference to the blackness of the Raven's plumage—Desert-loving habits of the Raven—Its mode of attacking the eye—Notions of the old commentators—Ceremonial use of the Raven—Return of the Ravens—Cunning of the bird—Nesting-places of the Raven—The magpie and its character—The starling—Its introduction into Palestine—The Rabbi perplexed—Solution of the difficulty.

It is more than probable that, while the Hebrew word *oreb* primarily signifies the bird which is so familiar to

us under the name of RAVEN, it was also used by the Jews in a much looser sense, and served to designate any of the Corvidæ, or Crow tribe, such as the raven itself, the crow, the rook, the jackdaw, and the like. We will first take the word in its restricted sense, and then devote a brief space to its more extended signification.

As might be expected from the cosmopolitan nature of the Raven, it is very plentiful in Palestine, and even at the present time is apparently as firmly established as it was in the days when the various Scriptural books were written.

There are few birds which are more distinctly mentioned in the Holy Scriptures than the Raven, though the passages in which its name occurs are comparatively few. It is the first bird which is mentioned in the Scriptures, its name occurring in Gen. viii. 7 : ‘ And it came to pass at the end of forty days, that Noah opened the window of the ark which he had made ;

‘ And he sent forth a raven, which went forth to and fro, until the waters were dried up from off the earth.’

Here we have, at the very outset, a characteristic account of the bird. It left the ark, and flew to and fro, evidently for the purpose of seeking food. The dove, which immediately followed the Raven, acted in a different manner. She flew from the ark in search of food, and, finding none, was forced to return again. The Raven, on the contrary, would find plenty of food in the bodies of the various animals that had been drowned, and were floating on the surface of the waters, and, therefore, needed not to enter again into the ark. The context shows that it made the ark a resting-place, and that it ‘ went forth to and fro,’ or, as the Hebrew Bible

renders the passage, 'in going and returning,' until the waters had subsided. Here, then, is boldly drawn the distinction between the two birds, the carrion-eater and the feeder on vegetable substances—a distinction to which allusion has already been made in the history of the dove.

Passing over the declaration in Lev. xi. 15 and Deut. xiv. 14, that every Raven (*i.e.* the Raven and all its tribe) is unclean, we come to the next historical mention of the bird. This occurs in 1 Kings xvii. When Elijah had excited the anger of Ahab by prophesying three years of drought, he was divinely ordered to take refuge by the brook Cherith, one of the tributaries of the Jordan. 'And it shall be, that thou shalt drink of the brook; and I have commanded the ravens [*orebim*] to feed thee there.

'So he went and did according unto the word of the Lord: for he went and dwelt by the brook Cherith, that is before Jordan.

'And the ravens brought him bread and flesh in the morning, and bread and flesh in the evening, and he drank of the brook.'

In this passage we have a history of a purely miraculous character. It is not one that can be explained away. Some have tried to do so by saying that the banished prophet found the nests of the Ravens, and took from them daily a supply of food for his sustenance. The repetition of the words 'bread and flesh' shows that the sacred writer had no intention of signifying a mere casual finding of food which the Ravens brought for their young, but that the prophet was furnished with a constant and regular supply of bread and meat twice in the

day. It is a statement which, if it be not accepted as the account of a miracle, must be rejected altogether.

I may here mention that an explanation of the



THE RAVEN.

'Who provideth for the raven his food?'—JOB xxxviii. 41.

passage has been offered by some commentators, who render the word *orebim* as 'Arabs,' and so arrive at the conclusion that the prophet was fed in his retirement by

the Arab tribes which came to the brook for water. Others have thought that the Orebim were the inhabitants of a village called Orbo, near the Cherith. There is, however, no need of any such explanations. The account of the prophet's flight to the Cherith and of the daily supply of food which he received has been accepted as a simple statement of facts by all Jewish writers, and there is no alternative but either to accept it in the same sense or to reject it.

This part of the subject naturally leads to certain passages in which the feeding of the young Ravens is mentioned. See, for example, Job xxxviii. 41 : 'Who provideth for the raven his food? when his young ones cry unto God, they wander for lack of meat.' This passage is rendered rather differently and more forcibly in the Jewish Bible. 'Who provideth for the raven his food, when his young ones cry unto God, and wander for lack of meat?' A passage of similar import occurs in Ps. cxlvii. 9 : 'He giveth to the beast his food, and to the young ravens which cry.' An evident reference is made to these passages in Luke xii. 24 : 'Consider the ravens: for they neither sow nor reap; which neither have storehouse nor barn; and God feedeth them: how much more are ye better than the fowls?'

In all these cases reference is made to a curious idea which prevailed respecting the Raven. It was thought that the Raven was a cruel parent, and that after the eggs were hatched it cared nothing for the young until they were full fledged. As, moreover, the bird was thought to be peculiarly late in attaining its plumage, the young Ravens must all die of hunger, were they not

fed in some remarkable manner. This subject is treated at some length by Luis of Grenada in his Sermons. As the passage in question is a very curious one, I give a translation.

‘Fourteenth Sunday after Pentecost, Sermon 1 :

‘For if it were not that all these things afford to us great matter of admiration and demonstration of the providence of God, it were in vain that the Lord, among other tokens of His wisdom and providence, had selected this also, when He saith in Job : “ Who provideth for the raven his food ? when his young ones cry unto God, wandering for lack of meat.” And in the Psalms : “ Who giveth their own food to the cattle, and to the young ravens that call upon Him.”

‘Now that in this place He hath been mainly mindful of the ravens’ young, is partly for this cause, that marvellously in them the singular care of Providence doth show forth. For a certain annotator saith, that the young ravens while as yet they are unfledged do appear of whiteness, and therefore are neglected of their parents as if they were bastards, seeing that they resemble not their colour. At which time Divine Providence, who nowhere sleepeth, doth feed them who call upon Himself. For He causeth certain vermicles (small worms) to be bred in the little nest, by eating of which they are sustained, until at length on the ninth day, the feathers beginning to grow, they resemble the colour of their parents, and so come to be nourished by them.

‘Seeing then that Divine Providence is never wanting in any matter, not even to these little creatures, though they be deserted of their parents, how great is that distrust which averreth that it is wanting unto men alone !

If man be among all the creatures of this lower world the noblest and the fairest of things; if he alone be made illustrious by God's image; if he himself be of this great family the leader and lord; if in obedience to him all things serve; if the Constructor of all things hath put under his feet "all sheep and oxen, yea, and the beasts of the field;" how shall it be that when the Lord, the Ruler of this world, shutteth out none, neither insect nor worm, from the care of His providence, but supplieth abundantly all things for all, He should suffer the righteous man, for whose service he hath appointed all things, to perish of hunger and lack of food?

'If it be that every father would diligently care for his son's household, and men-servants, and maid-servants, and cattle, and provide them abundantly with all things needful, how should He suffer His sons to perish whose families he cherisheth and feedeth with so great care? Who, indeed, could harbour such a thought? This then is another consideration whereby the heavenly Master seeks to cure our distrust, and to feed and stay our hope.'

Some of the old writers improved on this legend by saying that the worms crawled into the mouths of the young Ravens, so that the birds had not even the trouble of picking them up.

Some of the ancient Jewish writers had an idea that the Raven was originally a white bird, and that its colour was changed by way of punishment for its evil disposition and deceitful conduct. A similar idea was held by the old mythological writers. They said that the Raven was formerly the favourite bird of Apollo, and that it was celebrated for its sweet song and snowy white plumage.

Part of its duty was to bring water for its master from the fountain Hippocrene.

One day, instead of doing its duty, the bird amused itself in the garden, and at last fell asleep. Fearful when it awoke that it should be punished for its carelessness, the cunning Raven snatched up a snake, killed it, and brought it to Apollo, saying that the serpent had disputed the passage to the fountain, and that, after a long fight, it had just been killed. Apollo, angry with the bird for having told a lie, drove it from his presence, and as it fled its musical voice turned into a harsh croak, and its white plumage became black.

‘Liar!’ exclaimed the god,
The Python-killer, as from his keen eye
The lightning darted, ‘me wouldst thou deceive
With such a wretched tale! Hence, hence! begone!
Black as thy falsehood fly through shuddering air,
A bird of lonely night! Dumb be thy voice
Of sweetest melody: henceforth thy cry
Tell but of woes and horrors, a wild shriek
Of darkness and dismay.’

Knight's Quarterly Magazine.

Reference to the blackness of the Raven's plumage is made in the Song of Solomon. ‘My beloved is white and ruddy, the chiefest among ten thousand.

‘His beard is as the most fine gold, his locks are bushy and black as a Raven’ (Cant. v. 10, 11). A similar expression is common among ourselves.

On account of its mode of life, the Raven cannot exist in a wild state in cultivated ground. Hence it has disappeared from the greater part of England, and is seldom to be seen except on wide moors or in large forests. Cultivated ground affords it scarcely any food,

and it is therefore a bird of the wilderness rather than of the towns.

Like all feeders on carrion, it is wonderfully quick in detecting a dead or dying animal, and rivals the vulture itself in the sharpness of its vision. If any one who is passing over a part of the country where Ravens still survive, should wish to see one of the birds, he has only to lie flat on the ground, and keep his eyes nearly shut, so as only to see through the lashes. Should there be a Raven within many miles, it is sure to discover the apparently dead body, and to alight at no great distance, walking round and round, with its peculiar sidelong gait, and, if it be not checked in time, will make a dash at the eye of the prostrate individual, and probably blind him for life.

This habit of pecking at the eye is inherent in all the crow tribe, probably because they know instinctively that if the animal will allow its eye to be pecked out it must be dead; and if it should still possess life, it would be blinded for the moment, so as to allow its assailant to escape. The Scriptures note this custom of the Raven, as we see in Prov. xxx. 17: 'The eye that mocketh at his father and despiseth to obey his mother, the ravens of the valley shall pick it out, and the young eagles shall eat it.'

The desert-loving habit of the Raven is noticed in Isa. xxxiv. 11: 'The cormorant and the bittern shall possess it; the owl also and the raven shall dwell in it: and He shall stretch out upon it the line of confusion and the stones of emptiness.'

We will now pass to the notices of the Raven as given by the writers and commentators of the Talmud.

Being an unclean bird, and one of ill omen, it was not permitted to perch on the roof of the Temple. According to some writers, it was kept off by means of scarecrows, and according to others, by long and sharp iron spikes set so closely together that there was no room for the bird to pass between them. The latter is by far the more probable account, as the Raven is much too cunning a bird to be deceived by a scarecrow for any length of time. It might be alarmed at the first sight of a strange object, but in a very short time it would hold all scarecrows in supreme contempt.

Its carrion-eating propensities were well known to the ancient writers, who must have had many opportunities of seeing the Raven unite with the vultures in consuming the bodies, not only of dead animals, but of warriors killed in battle. So fond was the Raven of this food that, according to those writers, the very smell of human blood attracted the bird ; and if a man accidentally cut himself, or if he were bled for some illness, the odour of the blood would bring round the spot all the Ravens of the place.

The punctuality with which the Raven, in common with all its kin, returns to its roosting-place, was also familiar to the Talmudists, who made rather an ingenious use of this habit. The ceremonial law of the Jews required the greatest care in observing certain hours, and it was especially necessary to know the precise time which marked the separation of one day from another. This was ascertained easily enough as long as the day was clear, but in case of a dull, murky day, when the course of the sun could not be traced, some other plan was needed.

In the olden times, no artificial means of measuring time were known, and the devout Jew was consequently fearful lest he might unwittingly break the law by doing on one day an act which ought to have been done on another. A convenient method for ascertaining the time was, however, employed, and as soon as the Ravens, rooks, and similar birds were seen returning to their homes, the sun was supposed to be setting.

This habit of returning regularly at the same time is mentioned by Mr. Tristram in his 'Land of Israel':—

'Of all the birds of Jerusalem, the raven is decidedly the most characteristic and conspicuous. It is present everywhere to eye and ear, and the odours that float around remind us of its use. On the evening of our arrival we were perplexed by a call-note, quite new to us, mingling with the old familiar croak, and soon ascertained that there must be a second species of raven along with the common *Corvus corax*. This was the African species, the ashy-necked raven, a little smaller than the world-wide raven, and here more abundant in individuals.

'Beside these, the rook, the common grey, or hooded crow, and the jackdaw, roost by hundreds in the sanctuary. We used to watch them in long lines passing over our tents every morning at daybreak, and returning in the evening, the rooks in solid phalanx leading the way, and the ravens in loose order bringing up the rear, generally far out of shot. Before retiring for the night, popular assemblies of the most uproarious character were held together in the trees of the Kedron and Mount Olivet, and not until sunset did they withdraw in silence, mingled indiscriminately, to their roosting-places on the walls.

‘My companions were very anxious to obtain specimens of these Jerusalem birds, which could only be approached as they settled for the night ; but we were warned by the Consul that shooting them so close to the mosque might be deemed a sacrilege by the Moslems, and provoke an attack by the guardians of the Haram and the boys of the neighbourhood. They finally determined, nevertheless, to run the risk ; and stationing themselves just before sunset in convenient hiding-places near the walls, at a given signal they fired simultaneously, and, hastily gathering up the spoils, had retreated out of reach, and were hurrying to the tents before an alarm could be raised. The discharge of ten barrels had obtained fourteen specimens, comprising five species.

‘The same manœuvre was repeated with equal success on another evening ; but on the third occasion the ravens had learned wisdom by experience, and, sweeping round Siloam, chose another route to their dormitory.’

Those who have tried to come within gunshot of a Raven, even in this country, can appreciate this anecdote, and can understand how the Raven would ever afterwards keep clear of a spot where the flash and smoke of fire-arms had twice appeared.

An anecdote which authenticates this cautious turn of mind in the Raven is given in Mr. Thompson’s work on the ‘Natural History of Ireland.’ There was a large yard in which the sparrows used to congregate, and it was a custom of the owner to lay a train of corn for the sparrows to eat, and then to rake the whole line with a discharge from a gun concealed in an outhouse. A tame Raven lived about the premises, and as soon as it saw

any one carrying a gun towards the fatal outhouse, it became much alarmed, and hurried off to hide itself. As soon as the gun was fired, out came the Raven from its place of concealment, pounced on one of the dead sparrows, carried it off, and ate it in its private haunt.

The nest to which the Raven returns with such punctuality is placed in some spot where it is safe from ordinary intruders. The tops of lofty trees are favoured localities for the nest, and so are old towers, the interior of caves, and clefts in lofty precipices. The nest is large and clumsy, and the bird, trusting in the inaccessible character of the locality, troubles itself very little about concealment. The Raven is a peculiarly domestic bird, and a pattern of conjugal affection. It pairs for life, and both male and female take their share of sitting on the eggs and nurturing the young.

The old writers of whom mention has been made admitted that all the Corvidæ were signified by the word *oreb*. Sometimes they drew a distinction between them, but, as a rule, the word *oreb* might mean any of those birds, from a Raven to a starling.

The MAGPIE is one of those birds which is separately mentioned. Like the Raven, it was thought to be harsh and cruel to its young, so that whenever a man behaved badly to his children, either by neglect or by absolute cruelty, he was called a Magpie-man by way of derision. Similarly, a man of a morose or evil disposition was termed a Raven-hearted man. As, however, the Magpie is not entirely black, but has some white in its plumage, it was held to be rather a better bird than the Raven. Moreover, it is fond of haunting the habitations of men, so

that it was held to be of a softer nature than the Raven, which always kept itself as far from mankind as possible.

Lastly, we come to the Starling, which, as I have already mentioned, is considered as one of the Raven tribe, and is ranked under the name of Oreb. The old writers had no very great opinion of this bird, which they considered as exceptionally quarrelsome, probably on account of its shrill, harsh cry. They had a curious proverb, 'Two Starlings cannot sleep in one bed,' by which they meant that two quarrelsome people ought not to associate together.

There is a rather curious legend respecting the introduction of the Starling into Palestine.

Many years ago, a strange bird appeared in Jerusalem. It was caught, and brought before a celebrated Rabbi for examination, in order that he might decide whether it belonged to the clean or the unclean birds. After examining it, he could not make up his mind to either side of the question, and left the disputed point to be settled in a different way.

He ordered the bird to be placed on the roof of a house, and to be carefully watched, in order that the birds which associated with it might be noticed. For some time no birds of any kind would recognise the stranger, until at last there came a Raven from Egypt, which claimed acquaintance with it. In consequence of this, the Starling was ever afterwards classed with the Raven, and considered as an unclean bird. The Egyptian Raven which is here mentioned is described as being a very small bird, scarcely larger, indeed, than the Starling itself.

XX.

THE OSTRICH.

Hebrew words designating the Ostrich—Description of the bird in the Book of Job—Ancient use of Ostrich plumes—Supposed heedlessness of eggs and young—Mode of depositing the eggs—Hatching them in the sand—Natural enemies of the Ostrich—Anecdote of Ostriches and their young—Alleged stupidity of the Ostrich—Methods of hunting and snaring the bird—The Ostrich in domestication—Speed of the Ostrich—The flesh of the bird prohibited to the Jews—Ostrich eggs and their uses—Food of the Ostrich—Mode of drinking—Cry of the Ostrich, and reference made to it in Micah.

THERE is rather a peculiarity about the manner in which this bird is mentioned in the Authorized Version of the Scriptures, and, unless we go to the original Hebrew, we shall be greatly misled. In that version the Ostrich is mentioned only three times, but in the Hebrew it occurs eight times. If the reader will refer to page 55, he will see that the Hebrew word *bath-haya'nah*, which is translated in the Authorized Version as 'owl,' ought really to be rendered as 'Ostrich.' Taking this to be the case, we find that there are several passages in the Scriptures in which the word has been used in the wrong sense, and that in those places, instead of rendering the word as 'owl,' we ought to read it as 'Ostrich.'

The first mention of this bird occurs in Lev. xi. 16, and the parallel passage of Deut. xiv., in which the Ostrich is reckoned among the unclean birds, without any notice being given of its appearance or habits.

In the Book of Job, however, we have the Ostrich mentioned with that preciseness and fulness of description



THE OSTRICH.

'What time she li'teth up herself on high, she scorneth the horse and his rider.'—JOB. xxxix. 18.

which is so often the case when the writer of that wonderful poem treats of living creatures.

‘Gavest thou the goodly wings unto the peacocks? or wings and feathers unto the ostrich?’

‘Who leaveth her eggs in the earth, and warmeth them in the dust,

‘And forgetteth that the foot may crush them, or that the wild beast may break them.

‘She is hardened against her young ones, as though they were not hers: her labour is in vain without fear;

‘Because God hath deprived her of wisdom, neither hath He imparted to her understanding.

‘What time she lifteth up herself on high, she scorneth the horse and his rider.’ (Job xxxix. 13–19.)

There is rather a peculiarity in the translation of this passage, wherein the word which has been translated as ‘peacock’ is now allowed to be properly rendered as ‘Ostrich,’ while the word which is translated as ‘Ostrich’ ought to have been given as ‘feathers.’ The marginal translation gives the last words of ver. 13 in a rather different manner, and renders it thus: ‘Gavest thou the goodly wings unto the peacocks, or the feathers of the stork and ostrich?’ The Hebrew Bible renders the next verses as follows:—

‘She would yet leave her eggs on the earth, and warm them in dust; and forget that the foot may crush them, or that the beast of the field may break them.

‘She is hardened against her young ones, for those not hers; being careless, her labour is in vain.’

In the same book, chap. xxx., is another passage wherein this bird is mentioned. ‘I went mourning without the sun: I stood up, and I cried in the congregation.

'I am a brother to dragons, and a companion to owls,' or Ostriches, in the marginal and correct reading. The Jewish Bible also translates the word as Ostriches, but the word which the Authorized Version renders as 'dragons' it translates as 'jackals.' A somewhat similar passage occurs in Isa. xliii. 20: 'The beast of the field shall honour Me, the dragons and the owls' (Ostriches in marginal reading), 'because I give waters in the wilderness, and rivers in the desert, to give drink to My people, My chosen.' The Jewish Bible retains the same reading, except that the word 'dragons' is given with the mark of doubt.

Accepting, therefore, the rendering of the Hebrew as Ostriches, let us see how far the passages of Scripture agree with the appearance and habits of the bird.

Here I may observe that, although in the Scriptures frequent allusions are made to the habits of animals, we are not to look for scientific exactness to the Scriptures. Among much that is strictly and completely true, there are occasional errors, to which a most needless attention has been drawn by a certain school of critics, who point to them as invalidating the truth of Scripture in general. The real fact is, that they have no bearing whatever on the truth or falsehood of the Scriptural teachings.

The Scriptures were written at various times, for instruction in spiritual and not in temporal matters, and were never intended for scientific treatises on astronomy, mathematics, zoology, or any such branch of knowledge. The references which are made to the last-mentioned subject are in no case of a scientific nature, but are always employed by way of metaphor or simile, as the reader must have seen in the previous pages. No

point of doctrine is taught by them, and none depends on them.

The Spirit which conveyed religious instruction to the people could only use the means that existed, and could no more employ the scientific knowledge of the present time than use as metaphors the dress, arms, and inventions of the present day. The Scriptures were written in Eastern lands for Orientals by Orientals, and were consequently adapted to Oriental ideas; and it would be as absurd to look for scientific zoology in the writings of an ancient Oriental, as for descriptions of the printing-press, the steam-engine, the photographic camera, or the electric telegraph.

So, when we remember that only a few years ago the real history of the Ostrich was unknown to those who had made zoology the study of their lives, we cannot wonder that it was also unknown to those who lived many centuries ago, and who had not the least idea of zoology, or any kindred science.

Still, even with these drawbacks, it is wonderful how accurate in many instances were the writers of the Scriptures, and the more so when we remember the character of the Oriental mind, with its love of metaphor, its disregard of arithmetical precision, and its poetical style of thought.

We will now take the passage in Job xxxix. In ver. 13 reference is made to the wings and feathers of the Ostrich. The feathers of the Ostrich were formerly used as the emblem of rank. In this case, they are shown as fastened to the heads of the horses, and also in the form of a plume, fixed to the end of a staff, and appended to a chariot, as emblematical of the princely rank of the

occupier. In the ancient Egyptian monuments these Ostrich plumes are repeatedly shown, and in every case denote very high rank. These plumes were therefore held in high estimation at the time in which the Book of Job was written, and it is evidently in allusion to this fact that the sacred writer has mentioned so prominently the white plumes of the Ostrich.

Passing the next portion of the description, we find that the Ostrich is mentioned as a bird that is careless of its eggs, and leaves them 'in the earth, and warmeth them in the dust, and forgetteth that the foot may crush them, or that the wild beast may break them.'

Now it is true that the Ostrich is often known to take the greatest care of its eggs, the male collecting and sitting on them, and watching them with loving assiduity, and by some persons this fact has been brought forward as a proof that the writer of the Book of Job was mistaken in his statements. A further acquaintance with the habits of the bird tells us, however, that in those parts of the world which were known to the writer of that book the Ostrich does behave in precisely the manner which is described by the sacred writer.

Several females lay their eggs in the same nest, if the title of nest can be rightly applied to a mere hollow scooped in the sand, and, at least during the daytime, when the sun is shining, they simply cover the eggs with sand, so as to conceal them from ordinary enemies, and leave them to be hatched by the warm sunbeams. They are buried to the depth of about a foot, so that they receive the benefit of a tolerably equable warmth. So much,

then, for the assertion that the Ostrich leaves her eggs
'in the earth and warmeth them in the dust.'

We next come to the statement that she forgets that



OSTRICH AND NEST.

'Who leaveth her eggs in the earth, and warmeth them in the dust.'—JOB xxxix. 14.

'the foot may crush them, or that the wild beast may break them.' It is evident from the preceding description

that eggs which are buried a foot deep in the sand could not be crushed by the foot, even were they of a fragile character, instead of being defended by a shell as thick, and nearly as hard, as an ordinary earthenware plate. Neither would the wild beast be likely to discover, much less to break them.

A more intimate acquaintance with the history of the Ostrich shows that, even in this particular, the sacred writer was perfectly correct. Besides the eggs which are intended to be hatched, and which are hidden beneath the sand to be hatched, a number of supplementary eggs are laid which are not meant to be hatched, and are evidently intended as food for the young until they are able to forage for themselves. These are left carelessly on the surface of the ground, and may easily be crushed by the hoof of a horse, if not by the foot of man. We meet, however, with another statement,—namely, that they may be broken by the wild beasts. Here we have reference to another fact in the history of the Ostrich. The scattered eggs, to which allusion is made, are often eaten, not only by beasts, but also by birds of prey; the former breaking the shells by knocking them against each other, and the latter by picking up large stones in their claws, rising above the eggs, and dropping the stones on them. The bird would like to seize the egg, rise with it in the air, and drop it on a stone, as mentioned on page 6, but the round, smooth surface of the egg defies the grasp of talons, and, instead of dropping the egg upon a stone, it is obliged to drop a stone upon the egg.

Up to the present point, therefore, the writer of the Book of Job is shown to be perfectly correct in his

statements. We will now proceed to verse 16: 'She is hardened against her young ones, as though they were not hers.' Now in the Jewish Bible the passage is rendered rather differently: 'She is hardened against her young ones, for those not hers;' and, as we shall presently see, the reading perfectly agrees with the character of the Ostrich.

There has long existed a belief that the Ostrich, contrary to the character of all other birds, is careless of her young, neglects them, and is even cruel to them. That this notion was shared by the writer of the Book of Job is evident from the preceding passage. It also prevailed for at least a thousand years after the Book of Job was written. See Lam. iv. 3: 'Even the sea monsters draw out the breast, they give suck to their young ones: the daughter of my people is become cruel, like the ostriches in the wilderness.'

It is probable that this idea respecting the cruelty of the Ostrich towards its young is derived from the fact that if a flock of Ostriches be chased, and among them there be some very young birds, the latter are left behind by their parents, and fall a prey to the hunters. But, in reality, the Ostrich has no choice in the matter. The wide sandy desert affords no place of concealment in which it might hide its young. Nature has not furnished it with weapons by means of which it can fight for them; and consequently it is forced to use the only means of escape by which it can avoid sacrificing its own life, as well as the lives of the young.

It does not, however, leave the young until it has tried, by all means in its power, to save them. For example, it sometimes has recourse to the manœuvre

with which we are so familiar in the case of the lapwing, and pretends to be wounded or lamed, in order to draw the attention of its pursuers, while its young escape in another direction. An instance of this practice is given by Mr. Andersson in his 'Lake Ngami.' 'When we had proceeded little more than half the distance, and in a part of the plain entirely destitute of vegetation, we discovered a male and female ostrich, with a brood of young ones, about the size of ordinary barn-door fowls. We forthwith dismounted from our oxen, and gave chase, which proved of no ordinary interest.

'The moment the parent birds became aware of our intention, they set off at full speed—the female leading the way, and the cock, though at some little distance, bringing up the rear of the family party. It was very touching to observe the anxiety the birds evinced for the safety of their progeny. Finding that we were quickly gaining upon them, the male at once slackened his pace and diverged somewhat from his course; but, seeing that we were not to be diverted from our purpose, he again increased his speed, and, with wings drooping so as almost to touch the ground, he hovered round us, now in wide circles, and then decreasing the circumference until he came almost within pistol-shot, when he abruptly threw himself on the ground, and struggled desperately to regain his legs, as it appeared, like a bird that has been badly wounded.

'Having previously fired at him, I really thought he was disabled, and made quickly towards him. But this was only a ruse on his part, for, on my nearer approach, he slowly rose, and began to run in a different direction to that of the female, who by this time was

considerably ahead with her charge.' Nor is this a solitary instance of the care which the Ostrich will take of her young. Thunberg mentions that on one occasion, when he happened to ride near a place where an Ostrich was sitting on the eggs, the bird jumped up and pursued him, evidently with the object of distracting his attention from the eggs. When he faced her, she retreated; but as soon as he turned his horse, she pursued him afresh.

The care of the mother for the young is perhaps less needed with the Ostrich than with most birds. The young are able to run with such speed that ordinary animals are not able to overtake them, and, besides, they are protected by their colour as long as they are comparatively helpless. Their downy plumage harmonizes completely with the sandy and stony ground, even when they run, and when they crouch to the earth, as is their manner when alarmed, even the most practised eye can scarcely see them. Mr. Andersson, an experienced hunter, states that when the Ostrich chicks were crouching almost under his feet, he had the greatest difficulty in distinguishing their forms.

Owing to the great number of the eggs that are laid, the young are often very numerous, between thirty and forty chicks sometimes belonging to one brood. In the Ostrich chase which has already been described, the brood were eighteen in number, and so great was their speed that, in spite of their youth and diminutive size, Mr. Andersson only succeeded in capturing nine of them after an hour's severe chase.

We find, therefore, that we must acquit the Ostrich of neglecting its young, much more of cruelty towards

them ; and we will now turn to the next charge against the bird, that of stupidity.

In one sense, the bird certainly may be considered stupid. Like nearly all wild creatures which live on large plains, it always runs against the wind, so as to perceive by scent if any enemies are approaching. Its nostrils are very sensitive, and can detect a human being at a very great distance. So fastidious is it in this respect, that no hunter who knows his business ever attempts to approach the Ostrich except from leeward. If a nest is found, and the discoverer wishes the birds to continue laying in it, he approaches on the leeward side, and rakes out the eggs with a long stick.

The little Bosjesman, who kills so many of these birds with his tiny bow and arrow, makes use of this instinct when he goes to shoot the Ostrich, disguised in a skin of one of the birds. Should an Ostrich attack him, as is sometimes the case, he only shifts his position to windward, so as to allow the birds to catch the scent of a human being, when they instantly make off in terror.

When, therefore, the Ostriches are alarmed, they always run to windward, instinctively knowing that, if an enemy should approach in that direction, their powers of scent will inform them of the danger. Being aware of this habit, the hunters manage so that while one of them goes round by a long detour to frighten the game, the others are in waiting at a considerable distance to windward, but well on one side, so that no indication of their presence may reach the sensitive nostrils of the birds. As soon as the concealed hunters see the Ostriches fairly settled down to their course, they dash off at right angles to the line which the birds are taking, and in this way

come near enough to use their weapons. The antelopes of the same country have a similar instinct, and are hunted in precisely the same manner.

Thus, then, in one sense the Ostrich may be considered as open to the charge of stupidity, inasmuch as it pursues a course which can be anticipated by enemies who would otherwise be unable to overtake it. But it must be remembered that instinct cannot be expected to prove a match for reason, and that, although its human enemies are able to overreach it, no others can do so, the instinct of running against the wind serving to guard it from any foe which it is likely to meet in the desert.

When captured alive, and tamed, it certainly displays no particular amount of intellect. The Arabs often keep tame Ostriches about their tents, the birds being as much accustomed to their quarters as the horses. In all probability they did so in ancient times, and the author of the Book of Job was likely to be familiar with tame Ostriches, as well as with the wild bird.

Stupidity is probably attributed to the tame bird in consequence of the habit possessed by the Ostrich of picking up and eating substances which cannot be used as food. For example, it will eat knives, bits of bone or metal, and has even been known to swallow bullets hot from the mould. On dissecting the digestive organs of an Ostrich, I have found a large quantity of stones, pieces of brick, and scraps of wood. These articles are, however, not intended to serve as food, but simply to aid digestion, and the bird eats them just as domestic fowls pick up gravel, and smaller birds grains of sand. In swallowing them, therefore, the Ostrich does not display any stupidity, but merely obeys a natural instinct.

Lastly, we come to the speed of the Ostrich : ‘ What time she lifteth up herself on high, she scorneth the horse and his rider.’

This statement is literally true. When the Ostrich puts forth its full speed, there is no horse that can catch it in a fair chase. It may be killed by the ruse which has already been described, but an adult Ostrich can run away from the swiftest horse. When it runs at full speed, it moves its long legs with astonishing rapidity, covering at each stride an average of twenty-four feet, a fact from which its rate of speed may be deduced. In consequence of this width of stride, and the small impression made in the sand by the two-toed foot, the track of a running Ostrich is very obscure. Perhaps no better proof of the swiftness of the bird can be given than the extreme value set upon it by the Arabs. Although they are bred to the desert as much as the Ostrich itself, and are mounted on horses whose swiftness and endurance are proverbial, they set a very high value on the Ostrich, and to have captured one of these birds establishes an Arab’s fame as a hunter.

Sometimes the Arabs employ the plan of cutting across the course of the bird, but at others they pursue it in fair chase, training their horses and themselves specially for the occasion. They furnish themselves with a supply of water, and then start in pursuit of the first flock of Ostriches they find. They take care not to alarm the birds, lest they should put out their full speed and run away out of sight, but just keep sufficiently near to force the birds to be continually on the move. They will sometimes continue this chase for several days, not allowing their game time to eat or

rest, until at last it is so tired that it yields itself an easy prey.

In Southern Africa, snares are used for taking the Ostrich. They are in fact ordinary springes, but of strength suitable to the size of the bird. The cord is made fast to a sapling, which is bent down by main strength, and the other end is then formed into a noose and fastened down with a trigger. Sometimes the bird is enticed towards the snare by means of a bait, and sometimes it is driven over it by the huntsmen. In either case, as soon as the Ostrich puts its foot within the fatal noose, the trigger is loosed, the sapling is released, and, with a violent jerk, the Ostrich is caught by the leg and suspended in the air.

Why the flesh of the Ostrich should have been prohibited to the Jews is rather a mystery. It is much valued by most natives, though some of the Arab tribes still adhere to the Jewish prohibition, and those Europeans who have tried it pronounce it to be excellent when the bird is young and tender, but to be unpleasantly tough when it is old. Mr. Andersson says that its flesh resembles that of the zebra, and mentions that the fat and blood are in great request, being mixed together by cutting the throat of the bird, passing a ligature round the neck just below the incision, and then shaking and dragging the bird about for some time. Nearly twenty pounds of this substance are obtained from a single Ostrich.

The ancient Romans valued exceedingly the flesh of this bird. We are told that Heliogabalus once had a dish served at his table containing six hundred Ostrich brains, and that another emperor ate a whole Ostrich at a meal. As an adult Ostrich weighs some twenty-five stone, we

may presume that the bird in question was a young one.

The eggs are most valuable articles of food, both on account of their excellent flavour and their enormous size. It is calculated that one Ostrich egg contains as much as twenty-five ordinary hen's eggs. Cooking the Ostrich egg is easily performed. A hole is made in the upper part of the egg, and the lower end is set on the fire. A forked stick is then introduced into the egg, and twirled between the hands, so as to beat up the whole of the interior. Europeans usually add pepper and salt, and say that this simple mode of cooking produces an excellent omelette.

The ordinary food of the Ostrich consists of the seeds, buds, and tops of various plants. It seems strange, however, that in the deserts, where there is so little vegetation, the bird should be able to procure sufficient food to maintain its enormous body. Each of the specimens which are kept at the Zoological Gardens eats on an average a pint of barley, the same quantity of oats, four pounds' weight of cabbage, and half a gallon of chaff, beside the buns, bread, and other articles of food which are given to them by visitors.

Although the Ostrich, like many other inhabitants of the desert, can live for a long time without water, yet it is forced to drink, and like the camel, which it resembles in so many of its ways, drinks enormously, taking in the water by a succession of gulps. When the weather has been exceptionally hot, the Ostrich visits the water-springs daily, and is so occupied in quenching its thirst that it will allow the hunter to come within a very short distance. It appears, indeed, to be almost intoxicated with its

draught, and, even when it does take the alarm, it only retreats step by step, instead of scudding off with its usually rapid strides.

The camel-like appearance of the Ostrich has already been mentioned. In the Arabic language the Ostrich is called by a name which signifies camel-bird, and many of the people have an idea that it was originally a cross between a bird and a camel.

The cry of the Ostrich is a deep bellow, which, according to travellers in Southern Africa, so resembles the roar of the lion that even the practised ears of the natives can scarcely distinguish the roar of the animal from the cry of the bird. The resemblance is increased by the fact that both the lion and Ostrich utter their cry by night. It is evidently to this cry that the prophet Micah alludes : 'Therefore I will wail and howl, I will go stripped and naked : I will make a wailing like the dragons, and mourning as the owls' (Ostriches in marginal reading). The cry of the variety of Ostrich which inhabits Northern Africa is said to bear more resemblance to the lowing of an ox than the roar of the lion ; but as the bird is smaller than its southern relative, the difference is probably accounted for.

It has been mentioned that the Ostrich has no weapons wherewith to fight for its young ; still, though it be destitute of actual weapons, such as the spur of the gamecock or the beak and talons of the eagle, it is not entirely defenceless. Its long and powerful legs can be employed as weapons, and it can kick with such force that a man would go down before the blow, and probably, if struck on the leg or arm, have the limb broken. The blow is never delivered backward, as is the kick of the horse, but for-

ward, like that of the kangaroo. The natives of the countries where it resides say that it is able to kill by its kick the jackal that comes to steal its eggs, and that even the hyæna and the leopard are repelled by the gigantic bird.

XXI.

THE BITTERN.

Signification of the word *Kippod*—The Bittern and its general appearance—The bird of solitude—Difficulty of detecting the Bittern in its haunts—Mudie's description of the Bittern and its home—The strange cry of the bird—Superstitions connected with it—The Night-raven—Nest of the Bittern—Scarcity of the bird at the present day—Food of the Bittern—The bird formerly brought to table.

THE Hebrew word *Kippod*, which has been rendered in the Authorized Version as 'Bittern,' is in all probability the Syrian hedgehog, and the Jewish Bible accepts that rendering without even affixing the mark of doubt to the word. As, however, some writers on the subject still adhere to the more familiar rendering, a short account will be given of the Bittern.

The Bittern belongs to the same family as the herons, the cranes, and the storks, and has many of the habits common to them all. It is, however, essentially a bird of solitude, hating the vicinity of man, and living in the most retired spots of marshy ground. As it sits among the reeds and rushes, though it is a large bird, it is scarcely visible even to a practised eye, its mottled plumage harmonizing with surrounding objects in such a way that the feathers of the bird can scarcely be

distinguished from the sticks, stones, and grass tufts among which it sits. The ground colour of the plumage is dark buff, upon which are sprinkled mottlings and streaks of black, chestnut, grey, and brown. These mottled marks harmonize with the stones and tufts of withered grass, while the longitudinal dashes of buff and black on the neck and breast correspond with the sticks and reeds.

In a similar manner the tiger, though so large an animal, can lie in a very small covert of reeds without being detected, its striped fur corresponding with the reeds themselves and the shadows thrown by them; and the leopard can remain hidden among the boughs of a tree, its spotted coat harmonizing with the broken light and shade of the foliage.

The following powerful description of the Bittern's home is given by Mudie: 'It is a bird of rude nature, where the land knows no character save that which the untrained working of the elements impresses upon it; so that when any locality is in the course of being won to usefulness the bittern is the first to depart, and when any one is abandoned, it is the last to return. "The bittern shall dwell there" is the final curse, and implies that the place is to become uninhabited and uninhabitable. It hears not the whistle of the ploughman, nor the sound of the mattock; and the tinkle of the sheep-bell, or the lowing of the ox (although the latter bears so much resemblance to its own hollow and dismal voice, that it has given foundation to the name), is a signal for it to be gone.

'Extensive and dingy pools—if moderately upland, so much the better—which lie in the hollows, catching, like so many traps, the lighter and more fertile mould which

the rains wash and the winds blow from the naked heights around, and converting it into harsh and dingy vegetation, and the pasture of those loathsome things which wriggle



THE BITTERN.

'I will also make it a possession for the bittern, and pools for water.'—ISA. xiv. 23.

in the ooze, or crawl and swim in the putrid and mantling waters, are the habitation of the bittern.

‘Places which scatter blight and mildew over every herb which is more delicate than a sedge, a carex, or a rush,

and consume every wooded plant that is taller than the sapless and tasteless cranberry or the weeping upland willow ; which shed murrain over the quadrupeds, chills which eat the flesh off their bones, and which, if man ventures there, consume him by putrid fever in the hot and dry season, and shake him to pieces with ague when the weather is cold and humid.

‘Places from which the heath and the lichen stand aloof, and where even the raven, lover of disease, and battener upon all that expires miserably and exhausted, comes rarely and with more than wonted caution, lest that death which he comes to seal and riot upon in others should unawares come upon himself. The raven loves carrion on the dry and unpoisoning moor, scents it from afar, and hastens to it upon his best and boldest wing ; but “ the reek o’ the rotten fen ” is loathsome to the sense of even the raven, and it is hunger’s last pinch ere he come nigh to the chosen habitation, the only loved abode, of the bittern.’

Secure in its retreat, the Bittern keeps its place even if a sportsman should pass by the spot on which it crouches. It will not be tempted to leave its retreat by noise, or even by stone-throwing, for it knows instinctively that the quaking bogland which it selects as its home is unsafe for the step of man.

The very cry of the Bittern adds to this atmosphere of desolation. By day the bird is silent, but after the sun has gone down it utters its strange wild cry, a sound which exactly suits the localities in which it loves to make its habitation. During part of the year it only emits a sharp, harsh cry as it rises on the wing, but during the breeding season it utters the cry by which it summons

its mate, one of the strangest love-calls that can be imagined. It is something between the neighing of a horse, the bellow of a bull, and a shriek of savage laughter. It is very loud and deep, so that it seems to shake the loose and marshy ground. There was formerly an idea that, when the Bittern uttered this booming cry, it thrust its bill into the soft ground, and so caused it to shake. In reality, the cry is uttered on the wing, the bird wheeling in a spiral flight, and modulating its voice in accordance with the curves which it describes in the air. This strange sound is only uttered by the male bird.

In every country inhabited by the Bittern we find that its deep sepulchral cry, booming out through the darkness, and heard at an immense distance, has been dreaded as the prophecy of some evil to come. In some parts both of England and Ireland it is known as the Night-raven, and under that title is held in the greatest fear. Allusion is made to this belief in the well-known passage from Middleton's 'Witch':—

At the Night-raven's dismal voice,
When others tremble, we rejoice;
And nimbly, nimbly, dance we still
To the echoes of a hollow hill.

Under the same title Goldsmith writes of it in his 'Animated Nature.' 'I remember, in the place where I was a boy, with what terror the bird's note affected the whole village—they considered it as the presage of some sad event, and generally found or made one to succeed it. I do not speak ludicrously, but if any person in the neighbourhood died, they supposed it could not be otherwise, for the night-raven had foretold it; but if nobody

happened to die, the death of a cow or a sheep gave completion of the prophecy.'

In some parts of England the Bittern is known by the odd title of Butter-bump, a fact which was mentioned in the *Zoologist* many years ago:—

There'll either be rain, or else summat waur,
When Butter-bump sings upo' Potterie car.

About Fermanagh, in Ireland, the Bittern is called Bog-bluitar, *i.e.* Bog-bleater, just as the snipe is termed the Heather-bluitar.

Like most of the long-legged wading birds, the Bittern is able to change its shape, and apparently to alter its size, in an astonishing manner. When it is walking over the ground, with head erect and eye glanced vigilantly at surrounding objects, it looks a large, bold, vigorous, and active bird. Next minute it will sink its head in its shoulders, so that the long beak seems to project from them, and the neck totally disappears, the feathers enveloping each other as perfectly and smoothly as if it never had had a neck. In this attitude it will stand for an hour at a time on one leg, with the other drawn close to its body, looking as dull, inert, and sluggish a bird as can well be imagined, and reduced apparently to one-half of its former size. The Bittern is represented in one of its extraordinary attitudes on the plate which illustrates the cormorant.

The nest of the Bittern is placed on the ground, and near the water, though the bird always takes care to build it on an elevated spot which will not be flooded if the water should rise by reason of a severe rain. There is, however, but little reason for the Bittern to fear a

flood, as at the time of year which is chosen for nest-building the floods are generally out and the water higher than is likely to be the case for the rest of the year. The materials of the nest are found in marshes, and consist of leaves, reeds, and rushes.

It will be seen from the foregoing account, that if the word *Kippod* be translated as 'Bittern,' the imagery connected with it holds good, and that no more powerful figure could be imagined for the desolation of Babylon than the prophecy, 'I will make it a possession for the bittern, and pools of water' (Isa. xiv. 23).

Though once plentiful in England, the Bittern is now very scarce, and there are few who have seen it in its native haunts. Formerly, when swamps and marshes abounded, the Bittern abounded in proportion, but drainage and cultivation and railways have fairly driven the Bittern out of the country, and in a few years it will be as completely extinct in England as the bustard or the eagle. Even the great marshes of Essex are being reclaimed and rendered unfit for the occupation of the bird; and, from the upper part of the house where this account is written, I can see with the aid of the telescope cornfields, and pasture-lands, and barns, and ricks, and roads, diversifying the wide expanses which were once covered with brackish water at every flow of the tide, and at the ebb only left as quagmires through which the foot of man could not pass, and on which grew the rough and scanty herbage that flourishes under conditions that would kill almost any other vegetation.

No longer can the Bittern find a home there. Deep ditches intersect each other at short intervals, into which the moisture of the really rich soil is drained, and the

water that once stood in stagnant pools which the Bittern loved is conducted into them, and discharged into the river at the ebb tide. By the abstraction of the moisture, the whole country has been lowered more than a foot, and, together with the stagnant pools, the Bittern has vanished, never more to return. And here it may be mentioned that, although the Bittern inhabits none but desolate places, it only selects those which contain capabilities of cultivation. So, if the boom of the Bittern be heard, it may be accepted as deciding two things—firstly, that the ground is utterly deserted by man, and uncultivated; and secondly, that it ought to be occupied by him, and brought into cultivation.

At the present day, the Bittern is very plentiful in the swampy grounds which edge the Tigris, just as it used to be in the marshes which border the Thames. Should the time come when London will have passed away as completely as the great cities of old, and the banks of the Thames lie as desolate as those of the Tigris, the Bittern will reassume its sway, and its deep booming note will again be heard through the stillness of night.

As if to add to the general effect of its character, it is essentially a solitary bird, and in this characteristic entirely unlike its relatives the heron and the stork, which are peculiarly sociable, and love to gather themselves together in multitudes. But the Bittern is never found except alone, or at the most accompanied for a time by its mate and one or two young ones.

The localities in which it resides are sufficient evidence of the nature of its food. Frogs appear to be its favourite diet, but it also feeds on various fish, insects,



THE CORMORANT.

'But the cormorant and the bittern shall possess it.'—ISA. xxxiv. 11.

molluscs, worms, and similar creatures. Dull and apathetic as it appears to be, it can display sufficient energy to capture tolerably large fish. Though the Bittern is only about two feet in total length, one of these birds was killed, in the stomach of which were found one perfect rudd eight inches in length and two in depth, together with the remains of another fish, of a full-grown frog, and of an aquatic insect. In another instance, a Bittern had contrived to swallow an eel as long as itself; while in many cases the remains of five or six full-grown frogs have been found in the interior of the bird, some just swallowed, and others in various stages of digestion.

In former times the Bittern was used as food in England, and was considered one of the delicacies of a rich man's table. Partly on account of its scarcity, and partly on account of a popular prejudice, it is never eaten at the present day, and those few specimens which are occasionally exposed for sale are merely purchased for the sake of their plumage. The flesh of the Bittern justifies the predilection which was formerly exhibited for it, as it is tender, well-flavoured, and fat.

XXII.

THE HERON.

The Heron mentioned as an unclean bird—The Heron used for food in England, and considered as a delicacy—Sociable character of the bird, and its mode of feeding—Its enormous appetite—How the Heron fights—Ancient falconry—Nesting of the Heron—The papyrus marshes and their dangers—Description of the papyrus—Vessels of bulrushes—The Egret and its beautiful plumage—Uses of the train feathers.

THE name of the Heron is only mentioned twice in the Scriptures—namely, in the two parallel passages of Lev. xi. 19 and Deut. xiv. 18 ; in both of which places the Heron is ranked among the unclean birds that might not be eaten.

In some of the cases where beasts or birds are prohibited as food, the prohibition seems scarcely needed. To us of the present day this seems to be the case with the Heron, as it is never brought to table. The reason for this disuse of the Heron as food is not that it is unfit for the table, but that it has become so scarce by the spread of cultivation and house-building, that it has been gradually abandoned as a practically unattainable article of diet. The flesh of the Heron, like that of the bittern, is remarkably excellent, and in former days, when it was comparatively plentiful, and falconry was the ordinary amusement of the rich, the Heron formed a very important dish at every great banquet.

The bird, however, must be eaten when young. A gentleman who liked to try experiments for himself in

the matter of food, found that, if young Herons were properly cooked, they formed a most excellent dish, equal, in his opinion, to grouse. Wishing to have his own judgment confirmed by that of others, he had several of them trussed and dressed like wild geese, and served up at table under that name. The guests approved greatly of the bird, and compared it to hare, the resemblance being further increased by the dark colour of the flesh. There was not the slightest fishy flavour about the bird. This, however, is apt to be found in the older birds, but can be removed by burying them in the earth for several days, just as is done with the solan goose and one or two other sea-birds.

Several species of Heron inhabit Palestine, of which the common Heron, with which we are so familiar in England, is perhaps the most plentiful; and it is to this bird that the prohibition chiefly extends. But there were several other species of the bird, as is implied by the language of the law, which prohibited the Heron 'after her kind.' The Egrets are probably included in this category; and, if the word *kippod* be really the hedgehog, it is tolerably certain that the bittern was included under the general term Anâphah, which is given in the Authorized Version as Heron. The Jewish Bible follows the same reading, but affixes the mark of doubt to the word.

The abundance of birds belonging to the Heron tribe is well shown by some of the paintings and carvings on Egyptian monuments, in which various species of Herons and other water-birds are depicted as living among the papyrus reeds, exactly the locality in which they are most plentiful at the present day.

Unlike the bittern, the Heron is a most sociable bird,

and loves not only to live, but even to feed, in company with others of its own species. In Mr. Waterton's



THE HERON.

'These are they which ye shall have in abomination among the fowls . . . the stork, the heron after her kind.'—DEUT. xi. 13, 19.

grounds, near Walton, I have watched the Herons feeding in close proximity to each other. The birds were fond of wading stealthily along the edge of the lake until

they came to a suitable spot, where they would stand immersed in the water up to the thighs, waiting patiently for their prey. They stood as still as if they were carved out of wood, the ripples of the lake reflected on their plumage as the breeze ruffled the surface of the water. Suddenly there would be a quick dive of the beak, either among the reeds or in the water, and each stroke signified that the Heron had caught its prey.

Frogs and small fishes are the usual food of the Heron, though it often grapples with larger prey, having been seen to capture an eel of considerable size in its beak. Under such circumstances it leaves the water, with the fish in its mouth, and beats it violently against a stone so as to kill it. Now and then the bird is vanquished in the struggle by the fish, several instances being known in which an eel, in its endeavours to escape, has twisted itself so tightly round the neck of the bird that both have been found lying dead on the shore.

In one such case the Heron's beak had struck through the eyes of the eel, so that the bird could not disengage itself. In another the Heron had tried to swallow an eel which was much too large for it, and had been nearly choked by its meal. The eel must necessarily have been a very large one, as the Heron has a wonderful capacity for devouring fish. Even when quite young, it can swallow a fish as large as a herring, and when it is full grown it will eat four or five large herrings at a meal.

Now when we remember that an Englishman of average appetite finds one herring to form a very sufficient breakfast, we can easily imagine what must be the digestive power of a bird which, though very inferior to man in point of bulk, can eat four times as much at a

meal. Even though the fish be much larger in diameter than the neck of the bird, the Heron can swallow it as easily as a small snake swallows a large frog. The neck merely seems to expand as if it were made of indiarubber, the fish slips down, and the bird is ready for another.

Generally the Herons feed after sunset, but I have frequently seen them busily engaged in catching their prey in full daylight, when the sunbeams were playing in the water so as to produce the beautiful rippling effect on the Heron's plumage which has already been mentioned.

The Heron does not restrict itself to fishes or reptiles, but, like the bittern, feeds on almost any kind of aquatic animal which comes within its reach. When it lives near tidal rivers, it feeds largely on the shrimps, prawns, green crabs, and various other crustacea; and when it lives far inland, it still makes prey of the fresh-water shrimps, the water-beetles, and the boat-flies, and similar aquatic creatures. In fact, it acts much after the fashion of the lions, tigers, and leopards, which put up with locusts and beetles when they can find no larger prey.

The long beak of the Heron is not merely an instrument by which it can obtain food, but is also a weapon of considerable power. When attacked, it aims a blow at the eye of its opponent, and makes the stroke with such rapidity that the foe is generally blinded before perceiving the danger. When domesticated, it has been known to keep possession of the enclosure in which it lived, and soon to drive away dogs by the power of its beak. When it is young, it is quite helpless, its very long legs being unable to support its body, which is entirely bare of plumage, and has a very unprepossessing appearance.

The flight of the Heron is very powerful, its wings being very large in proportion to its slender body. Sometimes the bird takes to ascending in a spiral line, and then the flight is as beautiful as it is strong. When chased by the falcon it mostly ascends in this manner, each of the two birds trying to rise above the other.

The nest of the Heron is always made on the top of some lofty tree, whenever the bird builds in places where trees can be found; and as the bird is an eminently sociable one, a single nest is very seldom found, the Heron being as fond of society as the rook. In England the heronries are invariably found in clumps of trees, the nests of the birds being quite close together. In some parts of Palestine, however, where trees are very scarce, the Heron is obliged to choose some other locality for its nest, and in that case prefers the great thickets of papyrus reeds which are found in the marshes, and which are even more inaccessible than the tops of trees.

One of these marshes is well described by Mr. Tristram in his 'Land of Israel.' 'The whole marsh is marked in the map as impassable; and most truly it is so. I never anywhere have met with a swamp so vast and utterly impenetrable. First there is an ordinary bog, which takes one up to one's knees in water; then, after half a mile, a belt of deeper swamp, where the yellow water-lily flourishes; then a belt of tall reeds; the open water covered with white water-lily; and beyond again an impenetrable wilderness of papyrus, in the beautiful forest of which Dr. Thomson has not recognised the celebrated material of Egypt, though he has well described it under its Arabic name, "babeer" ("Land and Book," 259)

‘The papyrus extends right across to the east side. A false step off its roots will take the intruder over head in suffocating peat-mud. We spent a long time in attempting to effect an entrance, and at last gave it up, satisfied that the marsh birds were not to be had. In fact, the whole is simply a floating bog of several miles square; a very thin crust of vegetation covers an unknown depth of water; and, if the explorer breaks through this, suffocation is imminent. Some of the Arabs, who were tilling the plain for cotton, assured us that even a wild boar never got through it. We shot two bitterns, but in endeavouring to retrieve them I slipped from the root on which I was standing, and was drawn down in a moment, only saving myself from drowning by my gun, which had providentially caught across a papyrus stem.’

It may here be mentioned that the bulrush of Scripture is undoubtedly the papyrus. The ark or basket of bulrushes, lined with slime and pitch, in which Moses was laid, was made of the papyrus, which at the present day is used for the manufacture of baskets, mats, sandals, and for the thatching of houses. Many tribes which inhabit the banks of the Nile make simple boats, or rather rafts, of the papyrus, which they cut and tie in bundles; and it is worthy of notice that the Australian native makes a reed boat in almost exactly the same manner.

Compare Is. xviii. 1, 2: ‘Woe to the land shadowing with wings, which is beyond the rivers of Ethiopia.

‘That sendeth ambassadors by the sea, even in vessels of bulrushes.’ Did we not know that vessels are actually made of bulrushes at the present day, a custom which has survived from very ancient times, we might

find a difficulty in understanding this passage, while the meaning is intelligible enough when it is viewed by the light of the knowledge that the Ethiopian of the present day takes gold, and ivory, and other merchandise down the Nile in his boat of papyrus (or bulrush) reeds tied together.

The papyrus runs from ten to fifteen or sixteen feet in height, so that the Herons are at no loss for suitable spots whereon to place their nests. The name 'papyrus,' from which our word 'paper' is derived, is nothing more than a Latinised form of the old Arabic name 'babeer.' It is never found except in muddy and swampy places such as those which have already been mentioned. Thus we have in Job viii. 11 a reference to this quality of the papyrus: 'Can the rush grow up without mire? can the flag grow without water?'

The Egrets, which are probably included under the generic title of Anâphah, are birds of passage, and at the proper season are plentiful in Palestine. These pretty birds much resemble the heron in general form, and in general habits both birds are very much alike, haunting the marshes and edges of lakes and streams, and feeding upon the frogs and other inhabitants of the water. In countries where rice is cultivated, the Egret may generally be seen in the artificial swamps in which that plant is sown. The colour of the Egret is pure white, with the exception of the train. This consists of a great number of long slender feathers of a delicate straw colour. Like those which form the train of the peacock, they fall over the feathers of the tail, and entirely conceal them. The train of the Egret is highly valued in the

East, brushes being made of them wherewith flies can be driven away, or delicate articles dusted. As the bird is a very shy and wary one, these feathers cannot be easily procured, especially as they do not make their appearance until the bird has reached its third year, and had time to learn the signs of approaching danger. The Egret is rather larger than the heron, a full-grown specimen measuring about four feet in length, whereas the heron is scarcely more than a yard in total length. The train-feathers of the Egret add, however, to the apparent size of the bird.

XXIII.

THE CRANE.

Various passages in which the Crane is mentioned—Its migratory habits, and loud voice—Geographical range of the Crane—The bird once plentiful in the fen districts of England—Its favourite roosting-places—Size of the Crane, and measurement of the wings—The Crane once used as food—Plumes of the Crane and their use—Structure of the vocal organs—Nest and eggs of the Crane.

IN the description of the dove and the swallow two passages have been quoted in which the name of the CRANE is mentioned, one referring to its voice, and the other to its migratory instinct. The first passage occurs in Isa. xxxviii. 14: 'Like a crane or swallow, so did I chatter;' and the other in Jer. viii. 7: 'The turtle and the crane and the swallow observe the time of their coming.'

It is rather remarkable that in both these cases the word 'Crane' is used in connection with the swallow, or rather the swift, and that in both instances the names of

the birds should have been interchanged. If we refer to the original of these passages, we shall find that the former of them would run thus, 'Like a *sis* or an *agur*,'



THE CRANE.

'Like a crane . . . so did I chatter.'—ISA. xxxviii, 14.

and the latter thus, 'The turtle and the *sis* and the *agur*.' That in these passages the interpretation of the words *sis* and *agur* have been interchanged has already

been mentioned, and, as the former has been described under the name of swallow or swift, we shall now treat of the latter under the title of Crane.

The species here mentioned is the common Crane, a bird which has a very wide range, and has occasionally made its appearance in one or two parts of Great Britain. In Ireland it is thought to be common, but in that country the word Crane is simply a popular misnomer for the heron. As is the case with many wild birds, especially those of the larger kinds, the Crane appears to have been a much more frequent visitor of our shores than can be the case in the present day, when the land is thickly populated, and not a strange bird can show itself without running the risk of being shot.

As might be imagined, the Cranes favoured the great fen districts of England, especially those of Cambridgeshire and Lincolnshire, where it used to be found in large flocks. That in those days it bred in England is evident from Acts of Parliament in the reigns of Henry VIII. and Edward VI., in which reigns the taking of a Crane's egg was punished with a fine of twenty pence, in those days a considerable sum, being nearly four times the average daily wages of a working man. A small flock of Cranes was seen in Zetland in 1807, but at the present time drainage, cultivation, and house-building have as effectually extirpated the gregarious Crane as the solitary bittern.

The Crane performs its annual migrations in company, vast flocks of many thousand individuals passing like great clouds at an immense height, whence their trumpet-like cry is audible for a great distance round, and attracts the ear if not the eye to them. Thus we

have at a glance both the characteristics to which reference is made in the Scriptures, namely, the noisy cry and the habit of migration.

It is a very gregarious bird, associating with its comrades in flocks, just as do the starlings and rooks of our own country, and, like these birds, has favourite roosting-places in which it passes the night. When evening approaches, the Cranes may be seen in large flocks passing to their roosting-places, and, on account of their great size, having a very strange effect. A fair-sized Crane will measure seven feet across the expanded wings, so that even a solitary bird has a very imposing effect when flying, while that of a large flock of Cranes on the wing is simply magnificent.

The spots which the Crane selects for its roosting-places are generally of the same character. Being in some respects a wary bird, though it is curiously indifferent in others, it will not roost in any place near bushes, rocks, or other spots which might serve to conceal an enemy. The locality most favoured by the Crane is a large, smooth, sloping bank, far from any spot wherein an enemy may be concealed. The birds keep a careful watch during the night, and it is impossible for any foe to approach them without being discovered. The Crane is noisy on the wing, and, whether it be soaring high over head on its long migratory journeys, or be merely flying at dusk to its roosting-place, it continually utters its loud, clangorous cry.

The food of the Crane is much like that of the heron, but in addition to the frogs, fish, worms, and insects, it eats vegetable substances. Sometimes it is apt to get into cultivated grounds, and then does much damage to

the crops, pecking up the ground with its long beak, partly for the sake of the worms, grubs, and other creatures, and partly for the sake of the sprouting seeds.

Although by reason of its scarcity the Crane has been abandoned as food, its flesh is really excellent, and in former days was valued very highly, and was looked upon much in the same light as grouse or blackcock by ourselves at the present day. The two facts, that it was once comparatively plentiful and that it was highly valued for the table, are shown by an old record of the banquet following the enthronisation of an Archbishop of Canterbury, at which two hundred and four Cranes were served at table. Even in those days the bird was a very valuable one, the average cost exceeding three shillings, so that none but the wealthy could indulge in such a luxury.

Like the egret, the Crane is remarkable for the flowing plumes of the back, which fall over the tail feathers, and form a train. These feathers are much used as plumes, both for purposes of dress and as brushes or flappers wherewith to drive off the flies. By reason of this conformation, some systematic zoologists have thought that it has some affinity to the ostrich, the rhœa, and similar birds, and that the resemblance is strengthened by the structure of the digestive organs, which are suited to vegetable as well as animal substances, the stomach being strong and muscular.

The peculiar voice of the Crane, which it is so fond of using, and to which reference is made in the Scriptures, is caused by a peculiar structure of the windpipe, which is exceedingly long, and, instead of going straight to the lungs, undergoes several convolutions about the breast-bone, and then proceeds to the lungs.

The Crane makes its nest on low ground, generally among osiers or reeds, and it lays only two eggs, pale olive in colour, dashed profusely with black and brown streaks.

XXIV.

THE STORK.

Signification of the Hebrew word *Chasidah*—Various passages in which it is mentioned—The *Chasidah* therefore a large, wide-winged, migratory bird—Its identification with the Stork—Derivation of its Hebrew name—The Stork always protected—Uses of the tail—Its mode of quartering the ground in search of food—Migratory habits of the Stork—Nesting of the bird, and its favourite localities—The fir-trees of Palestine—Love of the Stork for its young.

IN the Old Testament there are several passages wherein is mentioned the word *Chasidah*. We will take these passages in their order. In the first place, we find that the *Chasidah* is enumerated in Lev. xi. 19 among the unclean creatures: 'And the stork, the heron after her kind, and the lapwing, and the bat.' The parallel passage in Deut. xiv. 18 has precisely the same words. Next we have the passage in Job xxxix. 13: 'Gavest thou the goodly wings unto the peacocks? or the feathers of the *chasidah* and ostrich?' (marginal reading.) Next we come to Ps. civ. 16, 17: 'The trees of the Lord are full of sap; the cedars of Lebanon, which He hath planted.

'Where the birds make their nests: as for the *chasidah*, the fir-trees are her house.'

Passing to the prophets, we find that Jeremiah uses

the same word (viii. 7): 'Yea, the chasidah in the heaven knoweth her appointed times; and the turtle and the crane and the swallow observe the time of their coming; but my people know not the judgment of the Lord.'

The last mention of the word occurs in Zech. v. 9: 'Then lifted I up mine eyes, and looked, and, behold, there came out two women, and the wind was in their wings; (for they had wings like the wings of a chasidah;) and they lifted up the ephah between the earth and the heaven.'

We learn from these passages that, in the first place, the Chasidah was certainly a bird, as it is mentioned in connexion with other birds, and is said to have wings and feathers. Our next business is to find out what particular bird is meant by the Chasidah. It is evident from the passage in Jeremiah that it is a migratory bird; from that in the Psalms, that it builds its nest upon a fir-tree; and from those in Job and Zechariah that it is a large-winged bird. These details very much narrow the question, which is still further limited by the fact that we have already identified the crane and the heron.

The Authorized Version invariably renders the word *Chasidah* as 'Stork,' and is undoubtedly right; though the Septuagint has no less than four different translations, reading it as 'heron' in one place, 'pelican' in another, 'hoopoe' in another, and in the fourth instance leaving the word untranslated, but Græcized into the form of *asida*. It would have been better if the last-mentioned plan had been followed throughout.

There is, however, no doubt that the Authorized Version is perfectly correct; and it is followed by the

Jewish Bible, in which no mark of doubt is affixed to the word.

In Buxtorf's Lexicon there is a curious derivation of the word. He says that the word *Chasidah* is derived from *chesed*, a word that signifies benevolence. This word is used in many familiar passages; such as, 'unworthy of all the *benefits*,' 'according to the multitude of Thy *mercies*,' 'exercising *pity*,' and so forth.

According to some writers, the name was given to the Stork because it was supposed to be a bird remarkable for its filial piety; 'for the storks in their turn support their parents in their old age: they allow them to rest their necks on their bodies during migration, and, if the elders are tired, the young ones take them on their backs.' According to others, the name is given to the Stork because it exercises kindness towards its companions in bringing them food; but in all cases the derivation of the word is acknowledged to be the same.

Partly in consequence of this idea, which is a very old and almost universal one, and partly on account of the great services rendered by the bird in clearing the ground of snakes, insects, and garbage, the Stork has always been protected through the East, as it is to the present day in several parts of Europe. The slaughter of a Stork, or even the destruction of its eggs, would be punished with a heavy fine; and in consequence of the immunity which it enjoys, it loves to haunt the habitations of mankind.

In many of the Continental towns, where sanitary regulations are not enforced, the Stork serves the purpose of a scavenger, and may be seen walking about the market-place, waiting for the offal of fish, fowls, and the

like, which are simply thrown on the ground for the Storks to eat. In Eastern lands the Stork enjoys similar privileges, and we may infer that the bird was perfectly familiar both to the writers of the various Scriptural books in which it was mentioned, and to the people for whom these books were intended.

When they settle upon a tract of ground, the Storks divide it among themselves in a manner that seems to have a sort of system in it, spreading themselves over it with wonderful regularity, each bird appearing to take possession of a definite amount of ground. By this mode of proceeding, the ground is rapidly cleared of all vermin ; the Storks examining their allotted space with the keenest scrutiny, and devouring every reptile, mouse, worm, grub, or insect that they can find on it. Sometimes they will spread themselves in this manner over a vast extent of country, arriving suddenly, remaining for several months, and departing without giving any sign of their intention to move.

The wings of the Stork, which are mentioned in Holy Writ, are very conspicuous, and are well calculated to strike an imaginative mind. The general colour of the bird is white, while the quill feathers of the wings are black ; so that the effect of the spread wings is very striking, an adult bird measuring about seven feet across, when flying. As the body, large though it may be, is comparatively light when compared with the extent of wing, the flight is both lofty and sustained, the bird flying a very great height, and, when migrating, is literally the 'stork in the heavens.'

Next we come to the migratory habits of the Stork.

Like the swallow, the Stork resorts year after year

to the same spots; and when it has once fixed on a locality for its nest, that place will be assuredly taken as regularly as the breeding-season comes round. The same pair are sure to return to their well-known home, notwithstanding the vast distances over which they pass, and the many lands in which they sojourn. Should one of the pair die, the other finds a mate in a very short time, and thus the same home is kept up by successive generations of Storks, much as among men one ancestral mansion is inhabited by a series of members of the same family.

So well is this known, that when a pair of Storks have made their nest in a human habitation their return is always expected, and when they arrive the absentees are welcomed on all sides. In many countries breeding-places are specially provided for the Storks; and when one of them is occupied for the first time, the owner of the house looks upon it as a fortunate omen.

The localities chosen by the Stork for its nest vary according to the surrounding conditions. The foundation which a Stork requires is a firm platform, the more elevated the better, but the bird seems to care little whether this platform be on rocks, buildings, or trees. If, for example, it builds its nest in craggy places, far from the habitations of man, it selects some flat ledge for the purpose, preferring those that are at the extreme tops of the rocks. The summit of a natural pinnacle is a favourite spot with the Stork.

In many cases the Stork breeds among old ruins, and under such circumstances it is fond of building its nest on the tops of pillars or towers, the summits of

arches, and similar localities. When it takes up its abode among mankind, it generally selects the breeding-places which have been built for it by those who know its taste, but it frequently chooses the top of a chimney, or some such locality.

Sometimes, however, it is obliged to build in spots where it can find neither rocks nor buildings, and in such cases it builds on trees, and, like the heron, is sociable in its nesting, a whole community residing in a clump of trees. It is not very particular about the kind of tree, provided that it be tolerably tall, and strong enough to bear the weight of its enormous nest; and the reader will at once see that the fir-trees are peculiarly fitted to be the houses for the Stork.

As is the case with so many zoological words, botanical names seem to be frequently used in a collective sense by the Scriptural writers, several species being signified by a single name. Thus the word which is in some cases translated as 'fir,' is in some rendered as 'pine-tree,' in others as 'juniper,' and in others as 'cypress.' In the present case it is undoubtedly translated rightly, though in the Jewish Bible it is rendered as 'cypress:' 'The trees of the Eternal satisfy themselves, the cedars of Lebanon which He hath planted; where birds make their nests: as for the stork, cypresses are its house.'

The particular species of fir-tree to which the Psalmist alludes is probably the Aleppo pine, which comes next to the great cedars of Lebanon in point of size. It was this tree that furnished the timber and planks for Solomon's temple and palace, a timber which was evidently held in the greatest estimation. This tree fulfils all the conditions which a Stork would require

in nest-building. It is lofty, and its boughs are sufficiently horizontal to form a platform for the nest, and strong enough to sustain it. On account of its value, and the reckless manner in which it has been cut down without new plantations being formed, the Aleppo pine has vanished from many parts of Palestine wherein it was formerly common, and would afford a dwelling-place for the Stork.

There are, however, several other species of fir which are common in various parts of the country, each species flourishing in the soil best suited to it, so that the Stork would never be at a loss to find a nesting-place in a country which furnished so many trees suitable to its purposes.

As may be expected from the localities chosen by the Stork for its breeding-place, its nest is very large and heavy. It is constructed with very little skill, and is scarcely more than a huge quantity of sticks, reeds, and similar substances, heaped together, and having in the middle a slight depression in which the eggs are laid. These eggs are usually three, or perhaps four in number, and now and then a fifth is seen, and are of a very pale buff or cream colour.

As is the case with the heron, the young of the Stork are quite helpless when hatched, and are most ungainly little beings, with their long legs doubled under them, unable to sustain their round and almost naked bodies, while their large beaks are ever gaping for food. Those of my readers who have had young birds of any kind must have noticed the extremely grotesque appearance which they possess when they hold up their heads and cry for food, with their bills open to an almost incredible

extent. In such birds as the Stork, the heron, and others of the tribe, the grotesque appearance is exaggerated in proportion to the length and gape of the bill.

The Stork is noted for being a peculiarly kind and loving parent to its young, in that point fully deserving the derivation of its Hebrew name, though its love manifests itself towards the young, and not towards the parent.

The Rev. H. B. Tristram mentions from personal experience an instance of the watchful care exercised by the Stork over its young. 'The writer was once in camp near an old ruined tower in the plains of Zana, south of the Atlas, where a pair of storks had their nest. The four young might often be seen from a little distance, surveying the prospect from their lonely height, but whenever any of the human party happened to stroll near the tower, one of the old storks, invisible before, would instantly appear, and, lighting on the nest, put its feet gently on the necks of all the young, so as to hold them down out of sight till the stranger had passed, snapping its bill meanwhile, and assuming a grotesque air of indifference, as unconscious of there being anything under its charge.' (Smith's 'Dict. Bible,' vol. iii. p. 1384.)

The snapping noise which is here mentioned is the only sound produced by the Stork, which is an absolutely silent bird, as far as voice is concerned.

There is another species of Stork found in Palestine, to which the fir-trees are especially a home. This is the Black Stork, which in some parts of the country is even more plentiful than its white relative, which it resembles

in almost every particular, except that it has a dark head and back, the feathers being glossed with purple and green like those of the magpie. This species, which is undoubtedly included in the Hebrew word *chasidah*, always makes its nest on trees whenever it can find them, and in some of the more densely wooded parts of Palestine is in consequence plentiful, placing its nest in the deepest parts of the forests. When it cannot obtain trees, it will build its nest on rocky ledges. It lays two or three eggs of a greenish white colour.

Like the preceding species, the Black Stork is easily domesticated. Colonel Montague kept one which was very tame, and would follow its keeper like a dog. Its tameness enabled its proceedings to be closely watched, and its mode of feeding was thereby investigated. It was fond of examining the rank grass and mud for food, and while doing so always kept its bill a little open, so as to pounce down at once on any insect or reptile that it might disturb.

Eels were its favourite food, and it was such an adept at catching them that it was never seen to miss one, no matter how small or quick it might be. As soon as it had caught one of these active fish, it went to some dry place, and then disabled its prey by shaking and beating it against the ground before swallowing it, whereas many birds that feed on fish swallow their prey as soon as it is caught. The Stork was never seen to swim as the heron sometimes does, but it would wade as long as it could place its feet on the bed of the stream, and would strain its head and the whole of its neck under water in searching for fish.

It was of a mild and peaceable disposition, and, even

if angered, did not attempt to bite or strike with its beak, but only denoted its displeasure by blowing the air sharply from its lungs, and nodding its head repeatedly. After the manner of Storks, it always chose an elevated spot on which to repose, and took its rest standing on one leg, with its head so sunk among the feathers of its shoulders that scarcely any part of it was visible, the hinder part of the head resting on the back, and the bill lying on the fore-part of the neck.

Though the bird is so capable of domestication, it does not of its own accord haunt the dwellings of men, like the White Stork, but avoids the neighbourhood of houses, and lives in the most retired places it can find. It may generally be seen in marshy grounds, spending the greater part of its time in procuring food, or in going to and from its nest while engaged in the task of feeding its young.

XXV.

THE SWAN.

Signification of the word *Tinshemeth*—The Gallinule and the Ibis—Appearance and habits of the Hyacinthine Gallinule—A strange use for the bird—The White or Sacred Ibis—The bird mentioned by Herodotus—The Glossy Ibis, or Black Ibis—Veneration with which the bird was regarded.

In the two parallel chapters of Lev. xi. 18 and Deut. xiv. 16, the Hebrew word *tinshemeth* is found, and evidently signifies some kind of bird which was forbidden as food. After stating (Lev. xi. 13) that ‘these are they which ye shall have in abomination among the fowls; they shall not be eaten, they are an abomination,’ the sacred lawgiver

proceeds to enumerate a number of birds, nearly all of which have already been described. Among them occurs the name of *tinshemeth*, between the great owl and the pelican.

What was the precise species of bird which was signified by this name it is impossible to say, but there is no doubt that it could not have been the Swan, according to the rendering of the Authorized Version. The Swan is far too rare a bird in Palestine to have been specially mentioned in the law of Moses, and in all probability it was totally unknown to the generality of the Israelites. Even had it been known to them, and tolerably common, there seems to be no reason why it should have been reckoned among the list of unclean birds.

On turning to the Hebrew Bible, we find that the word is left untranslated, and simply given in its Hebrew form, thereby signifying that the translators could form no opinion whatever of the proper rendering of the word. The Septuagint translates the *Tinshemeth* as the *Porphyrio* or *Ibis*, and the Vulgate follows the same rendering. Later naturalists have agreed that the Septuagint and Vulgate have the far more probable reading; and, as two birds are there mentioned, they will be both described.

The first is the *Porphyrio*, by which we may understand the *HYACINTHINE GALLINULE*. All the birds of this group are remarkable for the enormous length of their toes, by means of which they are enabled to walk upon the loose herbage that floats on the surface of the water as firmly as if they were treading on land. Their feet are also used, like those of the parrots, in conveying food to the mouth. We have in England a very familiar example of the *Gallinules* in the common water-hen, or

moor-hen, the toes of which are of great proportionate length, though not so long as those of the Purple Gallinule, which almost rivals in this respect the jacanas of



IBIS AND GALLINULE (SWAN OF SCRIPTURE).

These are they of which ye shall not eat . . . the little owl, and the great owl, and the swan,'
DEUT. xiv. 12, 16.

South America and China. The water-rail, and corn-crake or land-rail, are also allied to the Gallinules.

The Hyacinthine Gallinule derives its name from

its colour, which is a rich and variable blue, taking a turquoise hue on the head, neck, throat, and breast, and deep indigo on the back. The large bill and the legs are red. Like many other birds, however, it varies much in colour according to age.

It has a very wide geographical range, being found in many parts of Europe, Asia, and Africa, and is common in the marshy districts of Palestine, where its rich blue plumage and its large size, equalling that of a duck, render it very conspicuous. The large and powerful bill of this bird betokens the nature of its food, which consists almost entirely of hard vegetable substances, the seeds of aquatic herbage forming a large portion of its diet. When it searches for food on the seashore, it eats the marine vegetation, mixing with this diet other articles of an animal nature, such as molluscs and small reptiles.

Though apparently a clumsy bird, it moves with wonderful speed, running not only swiftly but gracefully, its large feet being no hindrance to the rapidity of its movements. It is mostly found in shallow marshes, where the construction of its feet enables it to traverse both the soft muddy ground and the patches of firm earth with equal ease. Its wings, however, are by no means equal to its legs either in power or activity; and, like most of the rail tribe, it never takes to the air unless absolutely obliged to do so.

The nest of the Hyacinthine Gallinule is made on the sedge patches which dot the marshes, much like that of the coot. The nest, too, resembles that of the coot, being composed of reeds, sedges, and other aquatic plants. The eggs are three or four in number, white in colour, and nearly spherical in form.

The ancients were well acquainted with the Hyacinthine Gallinule, and were in the habit of keeping it tamed in their houses, in which case it was prized by the men and hated by the women. There was a popular idea about the bird that it always detected any infidelity on the part of the female sex, and that when the master of the house came home the bird acquainted him with the crime by making gestures as if it wished to strangle itself.

There are several species of Gallinule, but that which has just been described is the most conspicuous, and therefore, if either of the Gallinules be the *Tinshemeth* of the Jewish lawgiver, we may safely conclude that the Hyacinthine Gallinule is the species.

As, however, the Ibis has an equal claim to the title of *Tinshemeth*, we will devote a few lines to a description of the bird. The particular species which would be signified by the word *tinshemeth* would undoubtedly be the WHITE or SACRED IBIS, a bird which derives its name of Sacred from the reverence with which it was held by the ancient Egyptians, and the frequency with which its figure occurs in the monumental sculptures. It was also thought worthy of being embalmed, and many mummies of the Ibis have been found in the old Egyptian burial-places, having been preserved for some three thousand years.

In his account of the various animals which were accounted sacred by the Egyptians, Herodotus mentions the Ibis, mixing up a considerable amount of truth with a few errors, and a good deal of superstition. Having heard of the relics of some winged serpents near the city

of Buto, he went to see them. 'When I arrived there I saw bones and spines of serpents, in such quantities as it would be impossible to describe: there were heaps of these spinal bones, some large, some smaller, and some still less, and there were great numbers of them.

'The place in which these spinal bones lie scattered is of the following description:—It is a narrow pass between two mountains into a spacious plain; this plain is contiguous to the plain of Egypt. It is reported that, at the beginning of spring, winged serpents fly from Arabia towards Egypt; but that the ibises, a sort of bird, meet them at the pass, and do not allow the serpents to go by, but kill them. For this service the Arabians say that the ibis is highly revered by the Egyptians, and the Egyptians acknowledge that they reverence these birds for this reason.

'The ibis is of the following description. It is all over a deep black, it has the legs of a crane, its beak is much curved, and it is about the size of a *crex*. Such is the form of the black ones that fight with the serpents. But those that are commonly conversant among men (for there are two species) are bare on the head and the whole neck; have white plumage, except on the head, the throat, and the tips of the wings and extremity of the tail. In all these parts that I have mentioned they are of a deep black; in their legs and back they are like the other kind.' (Herod. 'Euterpe,' 75, 76, Cary's translation.)

Putting aside the mention of the winged serpents, of which he only learned by hearsay, we find that Herodotus has given a very fair account of two species of Ibis,—namely, the GLOSSY or GREEN IBIS, and the White

or Sacred Ibis, whose scientific names have already been given.

The Glossy Ibis has been known to come as far as the British shores, but it requires a much warmer climate than that of England in order to pass its life in a state of health. It has, however, a large geographical range, being found both in Northern Africa and Southern America. It derives its popular name from the rich glossy plumage, which shines with a metallic or rather a silken lustre that is singularly beautiful in life, and is with great difficulty preserved in stuffed specimens.

The principal hue of the bird is very deep green, but it is so 'shot' with reflections of rich purple, blue, and gold, that it alters its hue with every change of light. At a little distance the deep green plumage looks quite black, as does that of the magpie, and on this account it has been called by Herodotus the Black Ibis.

This species is popularly called Abou Menzel, or Father Sickle-bill, on account of its slender curved beak, and in some places goes by the name of Abou Hannes, or Father John, because it makes its appearance upon or about St. John's Day. From all appearance it does not feed upon snakes, seeming to restrict itself to molluscs and similar food; and, on account of this discrepancy with the account given by Herodotus, many writers have doubted whether it could really be the bird meant by that historian and traveller. But we must remember that, though he saw both the black and the white Ibis, he did not see either of them eat snakes; and as those who told him of their serpent-devouring habits stated at the same time that the snakes had wings like those of the bat, we may summarily dismiss their account from the argument.

The White Ibis, however, is the bird which was most highly venerated by the Egyptians, and probably for that very reason was placed among the list of prohibited birds in the ancient law. It is about as large as an ordinary hen, and, as its name imports, has the greater part of its plumage white, the ends of the wing-feathers and the coverts being black, with violet reflections. The long neck is black and bare, and has a most curious aspect, looking as if it were made of an old black kid glove, very much crumpled, but still retaining its gloss.

The reason for the extreme veneration with which the bird was regarded by the ancient Egyptians seems rather obscure. It is probable, however, that the partial migration of the bird was connected in their minds with the rise of the Nile, a river as sacred to the old Egyptians as the Ganges to the modern Hindoo. As soon as the water begins to rise, the Ibis makes its appearance, sometimes alone, and sometimes in small troops. It haunts the banks of the river, and marshy places in general, diligently searching for food by the aid of its long bill. It can fly well and strongly, and it utters at intervals a rather loud cry, dipping its head at every utterance. Specimens of these birds can be seen at the Zoological Gardens.

XXVI.

THE CORMORANT.

The word *Shâlâk* and its signification—The Greek *Catarrhactes*—Habits of the Cormorant—The bird trained to catch fish—Mode of securing its prey—Nests and eggs of the Cormorant—Nesting in fir-trees—Flesh of the bird.

ALTHOUGH in the Authorized Version of the Scriptures the word Cormorant occurs three times, there is no doubt that in two of the passages the Hebrew word ought to have been rendered as Pelican, as we shall see when we come presently to the description of that bird.

In the two parallel passages, Lev. xi. 17 and Deut. xiv. 17, a creature called the *Shâlâk* is mentioned in the list of prohibited meats. That the *Shâlâk* must be a bird is evident from the context, and we are therefore only left to discover what sort of bird it may be. On looking at the etymology of the word we find that it is derived from a root which signifies hurling or casting down, and we may therefore presume that the bird is one which plunges or sweeps down upon its prey.

All Hebraists have agreed that it is one of the sea-birds, and this view of the case seems to be taken in the Septuagint, where the word is rendered by *Catarrhactes*, a term that has the same derivation in Greek as the *Shâlâk* in Hebrew. It is indeed the same word from which we form our term ‘cataract,’ to express the manner in which the water plunges or is hurled down from a height.

In consequence of this derivation, several writers have thought that the Shâlâk might be the Solan goose, or gannet, a bird which lives on fish, and always takes its prey by darting down upon it from a height. This bird, however, although it certainly answers completely to the sense of the word *shâlâk*, is not common enough on the shores of Palestine to be specially mentioned among the unclean birds. Other writers, seeing this difficulty, have thought that the Shâlâk might be one of the terns, or sea-swallows, forgetful of the fact that these are not plunging birds, although exceedingly swift of flight.

Weighing, however, the opinions of the various Hebraists and naturalists, we may safely determine that the word *shâlâk* has been rightly translated in the Authorized Version. The Hebrew Bible gives the same reading, and does not affix the mark of doubt to the word, though there are very few of the long list of animals in Lev. xi. and Deut. xiv. which are not either distinguished by the mark of doubt or, like the Tishemeth, are left untranslated.

The Cormorant belongs to the family of the pelicans, the relationship between them being evident to the most unpractised eye; and the whole structure of the bird shows its admirable adaptation for the life which it leads.

Its long beak enables it to seize even a large fish, while the hook at the end prevents the slippery prey from escaping. The long snake-like neck gives the bird the power of darting its beak with great rapidity, and at the same time allows it to seize prey immediately to the right or left of its course. Its strong, closely feathered wings enable it to fly with tolerable speed, while at the

same time they can be closed so tightly to the body that they do not hinder the progress of the bird through the water; while the tail serves equally when spread to direct its course through the air, and when partially or entirely closed to act as a rudder in the water. Lastly, its short powerful legs, with their broadly-webbed feet, act as paddles, by which the bird urges itself through the water with such wonderful speed that it can overtake and secure the fishes even in their own element. Besides these outward characteristics, we find that the bird is able to make a very long stay under water, the lungs being adapted so as to contain a wonderful amount of air.

The method of catching prey which is practised by the Cormorant is familiar to us from the fact that the Cormorant has been trained to play the same part in the water as the falcon in the air, and has been taught to catch fish, and bring them ashore for its master. So ^{Bring to} adroit are they, that if one of them should catch a fish ^{Good} which is too heavy for it another bird will come to its ^{Assistance} assistance, and the two together will bring the struggling & prey to land. Trained birds of this description have ^{Ever} been employed in China from time immemorial, and in ^{Goodly} later years they have been reintroduced into England, ^{Permissive} where they have often exhibited their really wonderful ^{will} powers.

In the days of Charles I. these birds were kept in training, and there was attached to the Court a professed official, called the King's Master of the Cormorants. These birds were usually caught and trained in Holland, and thence exported to England. The disturbed state of the country during the civil wars, added to the sport-

destroying character of the Puritans, seems to have caused the sport to be abandoned in this country, and it is only within the last few years that they have been again employed. In order to prevent it from swallowing the fish which it takes, each bird has a ring or ligature passed round its neck.

The Cormorant is a most voracious bird, swallowing a considerable weight of fish at a meal, and digesting them so rapidly that it is soon ready for another supply. Although it is essentially a marine bird, hunger often takes it inland, especially to places where are lakes or large rivers. Mr. Waterton mentions, in his 'Essays on Natural History,' that the Cormorants often visited the lake at Walton Hall, and that they soon became so familiar and fearless that after catching and eating their prey they would sit on the terrace and preen their feathers under the windows of the drawing-room.

The lake is by no means a large one, and it is probable that the birds were attracted by the absolute security which was felt by every winged creature within the domain. 'His skill in diving,' writes Mr. Waterton, 'is most admirable, and his success beyond belief. You may know him at a distance, among a thousand water-fowl, by his upright neck, by his body being apparently half immersed in the water, and by his being perpetually in motion when not on land.'

'While the ducks and teal and widgeons are stationary on the pool the cormorant is seen swimming to and fro, as if in quest of something. First raising his body nearly perpendicularly, down he plunges into the deep, and, after staying there a considerable time, he is sure to bring up a fish, which he invariably swallows head foremost.'

Sometimes half an hour elapses before he can manage to accommodate a large eel quietly in his stomach.

‘You see him straining violently with repeated efforts to gulp it; and when you fancy that the slippery mouthful is successfully disposed of, all on a sudden the eel retrogrades upwards from its dismal sepulchre, struggling violently to escape. The cormorant swallows it again, and up again it comes, and shows its tail a foot or more out of its destroyer’s mouth. At length, worn out with ineffectual writhings and slidings, the eel is gulped down into the cormorant’s stomach for the last time, there to meet its dreaded and inevitable fate.’

Mr. Fortune gives a somewhat similar account of the feeding of tame Cormorants in China. The birds preferred eels to all other food, and, in spite of the difficulty in swallowing the slippery and active creature, would not touch another fish as long as an eel was left. The bird is so completely at home in the water that it does not need, like the heron and other aquatic birds, to bring its prey ashore in order to swallow it, but can eat fish in the water as well as catch them. It always seizes the fish crosswise, and is therefore obliged to turn it before it can swallow the prey with the head downwards. Sometimes it contrives to turn the fish while still under water, but, if it should fail in so doing, it brings its prey to the surface, and shifts it about in its bill, making a series of little snatches at it until the head is in the right direction. When it seizes a very large fish, the bird shakes its prey just as a dog shakes a rat, and so disables it. It is said to eat its own weight of fish in a single day.

Sometimes, when it has been very successful or excep-

tionally hungry, it loads itself with food to such an extent that it becomes almost insensible during the process of digestion, and, although naturally a keen-eyed and wary bird, allows itself to be captured by hand.

The nest of the Cormorant is always upon a rocky ledge, and generally on a spot which is inaccessible except by practised climbers furnished with ropes, poles, hooks, and other appurtenances. Mr. Waterton mentions that when he descended the Raincliff, a precipice some four hundred feet in height, he saw numbers of the nests and eggs, but could not get at them except by swinging himself boldly off the face of the cliff, so as to be brought by the return swing into the recesses chosen by the birds.

The nests are mostly placed in close proximity to each other, and are made of sticks and seaweeds, and, as is usual with such nests, are very inartificially constructed. The eggs are of a greenish white on the outside, and green on the inside. When found in the nest, they are covered with a sort of chalky crust, so that the true colour is not perceptible until the crust is scraped off. Two to four eggs are generally laid in, or rather on, each nest. As may be imagined from the character of the bird's food, the odour of the nesting-place is most horrible.

Sometimes, when rocks cannot be found, the Cormorant is obliged to select other spots for its nest. It is mentioned in the 'Proceedings of the Zoological Society' that upon an island in the midst of a large lake there were a number of Scotch fir-trees, upon the branches of which were about eighty nests of the Cormorant.

The flesh of the Cormorant is very seldom eaten, as it has a fishy flavour which is far from agreeable. To eat an old Cormorant is indeed almost impossible, but the

young birds may be rendered edible by taking them as soon as killed, skinning them, removing the whole of the interior, wrapping them in cloths, and burying them for some time in the ground.

From the account of this bird, the reader will see that it may well be the Shâlâk of the Old Testament. Owing to its size and its peculiar habits, it is a very conspicuous bird, and therefore likely to be selected by name by the ancient lawgiver. And although its flesh is not very agreeable, it can be eaten; and, as has been shown, can be rendered tolerably palatable by a very simple process. The flesh of the Solan goose is deprived in a similar manner of its naturally rank and fishy flavour.

XXVII.

THE PELICAN.

The Pelican of the wilderness—Attitudes of the bird—Its love of solitude—Derivation of the Hebrew word—Fantastic interpretation—Mode of feeding the young—Fables regarding the Pelican—Breeding-places of the bird—The object of its wide wings and large pouch—Colour of the Pelican.

ON page 219 it has been mentioned that in two passages of Scripture, the word which is translated in the Authorized Version as Cormorant, ought to have been rendered as PELICAN. These, however, are not the first passages in which we meet with the word *kaath*. The name occurs in the two parallel passages of Lev. xi. and Deut. xiv. among the list of birds which are proscribed as food. Passing over them, we next come to Ps. cii. 6. In this

passage, the sacred writer is lamenting his misery : ‘ By reason of the voice of my groaning my bones cleave to my skin.

‘ I am like a pelican of the wilderness : I am like an owl of the desert.’

In these sentences, we see that the Kaath was a bird of solitude that was to be found in the ‘ wilderness,’ *i.e.* far from the habitations of man. This is one of the characteristics of the Pelican, which loves not the neighbourhood of human beings, and is fond of resorting to broad, uncultivated lands, where it will not be disturbed.

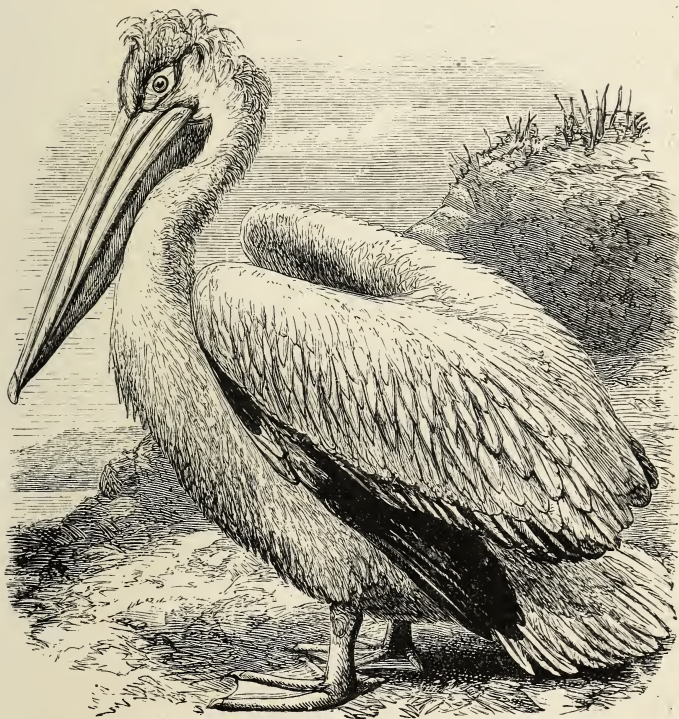
In them it makes its nest and hatches its young, and to them it retires after feeding, in order to digest in quiet the ample meal which it has made. Mr. Tristram well suggests that the metaphor of the Psalmist may allude to the habit common to the Pelican and its kin, of sitting motionless for hours after it has gorged itself with food, its head sunk on its shoulders, and its bill resting on its breast.

This is but one of the singular, and often grotesque, attitudes in which the Pelican is in the habit of indulging.

There are before me a number of sketches made of the Pelicans at the Zoological Gardens, and in no two cases does one attitude in the least resemble another. In one sketch the bird is sitting in the attitude which has just been described. In another it is walking, or rather staggering, along, with its head on one side, and its beak so closed that hardly a vestige of its enormous pouch can be seen. Another sketch shows the same bird as it appeared when angry with a companion, and scolding its foe in impotent rage ; while another shows it basking in the sun, with its magnificent wings spread

and shaking in the warm beams, and its pouch hanging in folds from its chin.

One of the most curious of these sketches shows the



THE PELICAN.

'I am like a pelican in the wilderness.'—Ps. cii. 6.

bird squatting on the ground, with its head drawn back as far as possible, and sunk so far among the feathers of the back and shoulders that only a portion of

the head itself can be seen, while the long beak is hidden, except an inch or two of the end. In this attitude it might easily be mistaken at a little distance for an oval white stone.

The derivation of the Hebrew word *kaath* is a very curious one. It is taken from a verb signifying 'to vomit,' and this derivation has been explained in different ways.

The early writers, who were comparatively ignorant of natural history, thought that the Pelican lived chiefly on molluscs, and that, after digesting the animals, it rejected their shells, just as the owl and the hawk reject the bones, fur, and feathers of their prey. They thought that the Pelican was a bird of a hot temperament, and that the molluscs were quickly digested by the heat of the stomach : 'conchas enim, calore ventris coctas, rursus evomit, ut testis rejectis, esculenta seligat.'

At the present day, however, knowing as we do the habits of the Pelican, we find that, although the reasons just given are faulty, and that the Pelican lives essentially on fish, and not on molluscs, the derivation of the word is really a good one, and that those who gave the bird the name of *Kaath*, or the vomiter, were well acquainted with its habits.

The bird certainly does eat molluscs, but the principal part of its diet is composed of fish, which it catches dexterously by a sort of sidelong snatch of its enormous bill. The skin under the lower part of the beak is so modified that it can form, when distended, an enormous pouch, capable of holding a great quantity of fish, though, as long as it is not wanted, the pouch is so contracted into longitudinal folds as to be scarcely perceptible,

When it has filled the pouch, it usually retires from the water, and flies to a retired spot, often many miles inland, where it can sit and digest at its ease the enormous meal which it has made.

As it often chooses its breeding-places in similar spots, far from the water, it has to carry the food with which it nourishes its young for many miles. For this purpose it is furnished, not only with the pouch which has been just mentioned, but with long, wide, and very powerful wings, often measuring from twelve to thirteen feet from tip to tip. No one, on looking at a Pelican as it waddles about or sits at rest, would imagine the gigantic dimensions of the wings, which seem, as the bird spreads them, to have almost as unlimited a power of expansion as the pouch.

In these two points the true Pelicans present a strong contrast to the cormorants, though birds closely allied. The cormorant has its home close by the sea, and therefore needs not to carry its food for any distance. Consequently, it needs no pouch, and has none. Neither does it require the great expanse of wing which is needful for the Pelican, that has to carry such a weight of fish through the air. Accordingly, the wings, though strong enough to enable the bird to carry for a short distance a single fish of somewhat large size, are comparatively short and closely feathered, and the flight of the cormorant possesses neither the grace nor the power which distinguishes that of the Pelican.

When the Pelican feeds its young, it does so by pressing its beak against its breast, so as to force out of it the enclosed fish. Now the tip of the beak is armed, like that of the cormorant, with a sharply-curved hook,

only, in the case of the Pelican, the hook is of a bright scarlet colour, looking, when the bird presses the beak against the white feathers of the breast, like a large drop of blood. Hence arose the curious legend respecting the Pelican, which represented it as feeding its young with its own blood, and tearing open its breast with its hooked bill. We find that this legend is exemplified by the oft-recurring symbol of the 'Pelican feeding its young' in ecclesiastical art, as an emblem of Divine love.

This is one of the many instances in which the inventive, poetical, inaccurate Oriental mind has seized some peculiarity of form, and based upon it a whole series of fabulous legends. As long as they restricted themselves to the appearance and habits of the animals with which they were familiarly acquainted, the old writers were curiously full, exact, and precise in their details. But as soon as they came to any creature of whose mode of life they were entirely or partially ignorant, they allowed their inventive faculties full scope, and put forward as zoological facts statements which were the mere creation of their own fancy. We have already seen several examples of this propensity.

The fabulous legends of the Pelican are too numerous to be even mentioned; but there is one which deserves notice, because it is made the basis of an old Persian fable.

The writer of the legend evidently had some partial knowledge of the bird. He knew that it had a large pouch which could hold fish and water; that it had large and powerful wings; and that it was in the habit of flying far inland, either for the purpose of digesting its

food or nourishing its young. Knowing that the Pelican is in the habit of choosing solitary spots in which it may bring up its young in safety, but not knowing the precise mode of its nesting, the writer in question has trusted to his imagination, and put forward his theories as facts.

Knowing that the bird dwells in 'the wilderness,' he has assumed that the wilderness in question is a sandy, arid desert, far from water, and consequently from vegetation. Such being the case, the nurture of the Pelican's young is evidently a difficult question. Being aquatic birds, the young must needs require water for drink and bathing, as well as fish for food; and, though a supply of both these necessities could be brought in the ample pouches of the parents, they would be wasted unless some mode of storing were employed.

Accordingly, the parent birds were said to make their nest in a hollow tree, and to line it with clay, or to build it altogether of clay, so as to leave a deep basin. This basin the parent birds were said to use as a sort of store-pond, bringing home supplies of fish and water in their pouches, and pouring them into the pond. The wild beasts who lived in the desert were said to be acquainted with these nests, and to resort to them daily in order to quench their thirst, repaying their entertainers by protecting their homes.

In real fact, the Pelican mostly breeds near water, and is fond of selecting little rocky islands where it cannot be approached without danger. The nest is made on the ground, and is formed in a most inartificial manner of reeds and grass, the general mass of the nest being made of the reeds, and the lining being formed of grass. The eggs are white, of nearly the same shape

at both ends, and are from two to five in number. On an average, however, each nest will contain about two eggs.

The parent birds are very energetic in defence of their eggs or young, and, according to Le Vaillant, when approached they are 'like furious harpies let loose against us, and their cries rendered us almost deaf. They often flew so near us that they flapped their wings in our faces, and, though we fired our pieces repeatedly, we were not able to frighten them.' When the well-known naturalist Sonnerat tried to drive a female Pelican from her nest, she appeared not to be frightened, but angry. She would not move from her nest, and when he tried to push her off, she struck at him with her long bill and uttered cries of rage.

In order to aid the bird in carrying the heavy weights with which it loads itself, the whole skeleton is permeated with air, and is exceedingly light. Besides this, the whole cellular system of the bird is honeycombed with air-cells, so that the bulk of the bird can be greatly increased, while its weight remains practically unaltered, and the Pelican becomes a sort of living balloon.

The habit of conveying its food inland before eating it is so characteristic of the Pelican that other birds take advantage of it. In some countries there is a large hawk which robs the Pelican, just as the bald-headed eagle of America robs the osprey. Knowing instinctively that when a Pelican is flying inland slowly and heavily and with a distended pouch it is carrying a supply of food to its home, the hawk dashes at it, and frightens it so that the poor bird opens its beak, and gives up to the assailant the fish which it was bearing homewards.

It is evident that the wings which are needed for supporting such weights, and which, as we have seen, exceed twelve feet in length from tip to tip, would be useless in the water, and would hinder rather than aid the bird if it attempted to dive as the close-winged cormorant does. Accordingly, we find that the Pelican is not a diver, and, instead of chasing its finny prey under water, after the manner of the cormorant, it contents itself with scooping up in its beak the fishes which come to the surface of the water. The very buoyancy of its body would prevent it from diving as does the cormorant, and, although it often plunges into the water so fairly as to be for a moment submerged, it almost immediately rises, and pursues its course on the surface of the water, and not beneath it. Like the cormorant, the Pelican can perch on trees, though it does not select such spots for its roosting-places, and prefers rocks to branches. In one case, however, when some young Pelicans had been captured and tied to a stake, their mother used to bring them food during the day, and at night was accustomed to roost in the branches of a tree above them.

One of the two passages to which allusion has already been made in which the word *kaath* has been wrongly translated, occurs in Isa. xxxiv. 10, 11: 'From generation to generation it shall lie waste; none shall pass through it for ever and ever.

'But the cormorant [Pelican in margin] and the bittern shall possess it; the owl also and the raven shall dwell in it: and He shall stretch out upon it the line of confusion and the stones of emptiness.'

These words form part of a prophecy concerning

Idumæa, or Edom, in which the desolation that is to come upon the land is painted in the most vivid colours. The streams are to be turned into pitch, and the dust into brimstone ; thorns are to come up in the palaces, and nettles and brambles in the fortresses, and the land is to be washed with blood. And so great is to be the desolation of the land, that even the Pelican, which keeps itself far from the habitations of men, is to possess it.

A similar figure is employed by the prophet Zephaniah, when writing of the utter destruction of Nineveh, that 'rejoicing city, that dwelt carelessly, that said in her heart, I am, and there is no more beside me.' In chap. ii. ver. 13, 14, the prophet writes as follows: 'He will stretch out His hand against the north, and destroy Assyria ; and will make Nineveh a desolation, and dry like a wilderness.

'And flocks shall lie down in the midst of her, all the beasts of the nations ; both the cormorant [Pelican] and bittern shall lodge in the upper lintels of it, their voices shall sing in the windows ; desolation shall be in the threshold : for He shall overcome the cedar work.'

In both these passages the Jewish Bible renders the word *kaath* as Pelican.

It will be now seen that, accepting the Kaath to be the Pelican, the imagery of the Scriptural writers is as accurate as it is forcible. Though under some circumstances a thoroughly social bird, it is yet fond of retiring to the most solitary spots in order to consume at peace the prey that it has captured ; and, as it sits motionless and alone for hours, more like a white stone than a bird, it may well be accepted as a type of solitude and desolation.

The colour of the common Pelican is white, with a very slight pinky tinge, which is most conspicuous in the breeding season. The feathers of the crest are yellow, and the quill feathers of the wings are jetty black, contrasting well with the white plumage of the body. The pouch is yellow, and the upper part of the beak bluish grey, with a red line running across the middle, and a bright red hook at the tip. This plumage belongs only to the adult bird, that of the young being ashen grey, and four or five years are required before the bird puts on its full beauty. There is no difference in the appearance of the sexes. The illustration on page 227 represents a fine old male Crested Pelican. The general colour is greyish white, with a slight yellowish tint on the breast. The pouch is bright orange, and the crest is formed of curling feathers.



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